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PERSONALITY AND LIFE SATISFACTION IN AN ELDERLY POPULATION

by

© PATRICIA NOREEN SHAW

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES

AND RESEARCH

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR

THE DEGREE OF MASTER OF EDUCATION

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY

EDMONTON, ALBERTA

FALL, 1978

THE UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled Personality and Life Satisfaction in an Elderly Population submitted by Patricia Noreen Shaw in partial fulfillment of the requirements for the degree of Master of Education.

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Date June 22/78

Abstract

The purpose of this study is to investigate the area of life satisfaction or morale in an elderly population and to try to determine which psychological and sociological factors are related to a sense of contentment in the later years.

Eighty-one subjects from the City of Edmonton over 60 years of age were interviewed using a personality factor questionnaire, a life satisfaction index, a demographic questionnaire and an attitude and activities survey.

A Pearson Product Moment correlation revealed a significant correlation between life satisfaction and six of ten personality factors. There were significant differences between the personality factor means of the elderly group and a normative group of younger subjects.

When an Analysis of Variance was performed on the Life Satisfaction Index scores grouped according to the different categories of marital status, income level, religious belief and strength of religious belief, perceived childhood and marital happiness, and a stated age preference, significant differences were found. No significant differences were found when an Analysis of Variance was performed on the Life Satisfaction Index scores grouped according to the different categories of sex, age, retirement status and pre-retirement occupation, independence of residence, educational level, self-perceived health, number of children, grandchildren and relatives, or the frequency or

source of social interaction.

In addition, open ended questions were used to reveal the subjects' attitudes to retirement and their hopes, fears, and concerns during this period of life. An investigation was also made into the types of leisure activity in which senior citizens actually engage during the retirement years.

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Finally many thanks to all the senior citizens who participated in the study for their time, courtesy, and interest, and for letting me have a glimpse of "the best that's yet to be - the last of life for which the first was made."

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Chapter I

Introduction

The focus of this study will be on people over the age of sixty years, and their psychological well-being. The terms elderly, senior citizen, geront, older person and aged will be used interchangeably to designate this group.

Increase in the Aged

The number of old people in the developed countries of the world today is increasing. This increase is both absolute, in terms of actual numbers of elderly people, and relative in terms of the other age groups in the population pyramid. The world-wide increase is also reflected in North American census figures. In 1900 only 4% of the population was over 65 years whereas by 1970 this group constituted 10% of the population (U.S. Public Health Service, 1970). Similarly, the Alberta Bureau of Statistics projects a decrease in the 0-14 years age group and an increase in the age group 65 plus over the years 1972-1985. (Alberta Statistical Review, 1975.) The City of Edmonton may be seen as a relatively youthful city as only 6.2% of its population is over 65 years compared with the national average of 8.1%. However in the years from 1966-1971 the number of elderly grew from 22,667 to 27,315. The total increase for all age groups was 14.8% whereas the increase for seniors was 20% (Statistics, Canada, 1971).

What are the factors that are responsible for this change in the number of seniors, and in the population pyramid? Botwinick (1973)

points out that this is not due to any extensive increase in the life span of man, but rather than more people are able to live to their potential limit due to improved medical care and living conditions. In addition to better medical care the increase is due also in part to the interaction with a falling birthrate, and a lowered infant mortality rate (allowing more people to live on into old age). (Bromley, 1966.)

Reluctance to Study the Aged

Until very recently there has been a general disinclination to study the aged, and a number of explanations have been advanced.

Western society in general has a rather negative attitude toward the elderly. Tournier (1971) sees this as due in part to their exclusion from economic productivity in a culture that values things over persons. Many people view the elderly as unattractive because of the presence of disability, powerlessness and uselessness (Butler, 1974). Bennet and Eckman (1973) stress the fact that in a youth-oriented culture the aged are automatically an "out group." These negative attitudes reflect an almost universal desire to avoid the contemplation of our own aging, even in a scientific context (de Beauvoir, 1972; Vischer, 1967).

Scientific study of an area in reasonable depth requires funding. This funding is not generally available for such studies until the area becomes recognized as representing a social problem. It is only in the recent past that the elderly have become numerous and visible enough to be perceived as a problem (Baltes & Labouvie, 1973; Blau, 1973; Neugarten, 1970). Perhaps the greatest influence of all in discouraging

study was the direction taken by the earliest studies where the institutionalized elderly were studied because they were a readily available sample (Kastenbaum, 1973; Pfeiffer, 1974). This non-representative sample of problem agers and the early emphasis on physiological change studies influenced by medical research, led to the "decremental model" of aging (Butler, 1974; Gottesman, Quaterman, & Cohn, 1973). This model views aging as the progressive loss of physical and intellectual capacities and ignores the wisdom, judgment, experience, powers of adjustment and other facets of the interior life of the aging individual which are related to his unique "personness" rather than his economic productivity (Butler, 1974; Tournier, 1971).

The complexity of the task and methodological problems have also discouraged researchers. There is no captive population to sample as in the case of school children, university students or army volunteers. There are disadvantages to both cross-sectional and longitudinal studies (Schaie & Strother, 1968). As life lengthens, individual differences increase and there appear to be few changes in the organism that are solely age-related (Jarvik & Cohen, 1973; Kastenbaum, 1973; Schaie, 1973). Birren (1964) noted that while a decline in ability is usually associated with age, so is an increase in intrapersonal variability.

Current Studies

The foregoing problems illustrate some of the reasons why studies of the aged were, until fairly recently, sparse and elementary in comparison with research on the child and the adolescent. Geron-

tology, the scientific discipline dealing with the older person and the aging process, is no more than three decades old. Breen (1970) traces the natural historical progression of interest in the elderly through five stages of differing focus. First, the literary and philosophical, followed by the physiological, the psychological and finally the political. It should be noted that all stages and foci are of concurrent interest and are generating their own bodies of research. Since 1946 there has been a rapid expansion of knowledge and interest with the establishment of research laboratories, gerontological societies, journals devoted to the subject of aging and a growing body of relevant research (Birren, 1961). In spite of this increased input, because of the relative newness and complexity of the area, the fact remains that relatively little is known about this period of life. Lawton (1973) notes the lack of a clinical psychology of old age and the reluctance of clinicians to enter the area. Of 96 universities offering graduate level developmental programs only 10 offered courses involving adulthood and old age (Brackbill, 1971). Botwinick (1970), comparing the literature to that of related fields such as child development, states that up to 15 years ago it was possible to know all the literature in the field of gerontology. Birren and Woodruff (1973) note that 87% of the literature in human development deals with the first quarter of the life span, and only 13% has content relevant to the lives of the other 70% of the population.

Reasons to Study the Aged

Why then with all the disadvantages and reluctance to study aging

should one find this an area worth investigating? Several arguments can be made that challenge previous attitudes to the study of aging.

The aged are beginning to constitute a social problem in terms of housing, health care, safety, etc. Government and other programs in order to deal with this problem will need increased input in the form of reliable information about the needs of these people. Enlightened self-interest suggests that greater knowledge of aging would be of benefit to everyone, as the average life expectancy for 45 year olds is presently 72 years for males and 77 years for females (Botwinick, 1973).

Modern research refutes the early data gathered from the institutionalized elderly which shows aging as an inevitable and predictable decline with little to be done to improve the quality of life of the aged. It is now thought that aging is neither predictable nor irreversible on a chronological basis alone, and valid interventions challenge the stereotype of a continuous decrement in general performance (Baltes & Labouvie, 1973; Butler, 1974; Kastenbaum, 1973). Perlin and Butler (1963) point out that changes in aging are not always in a detrimental direction.

Newer psychological techniques make positive behavioral change possible, regardless of the age of the individual. Older views such as those of Freud (1949/1969) and Rogers (1951) suggest the doubtful utility of psychotherapy for clients of advanced years. However newer behavioristic techniques such as systemic desensitization and the acceleration of desirable behavior by the control of the contingencies of

reinforcement are equally applicable to young and old (Gottesman, Quaterman & Cohn, 1973; Krasner, 1971). The emerging field of biofeedback holds promise of being capable of reestablishing correct body rhythm of heart, blood pressure, etc. in aging physiological systems (Luce & Peper, 1975).

Atchley (1972) sums up the need for knowledge about the elderly by pointing out that more and more people are being helped by medical and environmental conditions to live on into an advanced age, about which we know very little. The quality of their emotional lives is left entirely to chance and science has little or nothing to say to them about those factors which would enhance meaningfulness and a sense of satisfaction in the later years.

Purpose of the Study

The purpose of this study is to investigate the area of life satisfaction in an elderly population and to try to determine which psychological and sociological factors are related to this sense of meaningfulness and enjoyment of life. Life satisfaction has been described as psychological well-being or general morale. Henley and Davis (1967) define general life satisfaction "as a perceived state of mind that reflects relative contentment and freedom from anxiety and is reportable qualitatively by patients" (p. 65).

This concept reflects a backward look at the entire life-span and a value judgment as to its worthwhileness and inevitability somewhat akin to Erikson's (1950) "ego integrity or despair". A high degree

of life satisfaction would be the optimum psychological condition of the elderly and should be differentiated from the daily emotional fluctuations due to more fleeting conditions. What are the factors that are closely related to a sense of well-being? In an attempt to provide this information the following research questions were formulated.

Research Questions

In an aging population;

1. Do certain personality factors have a correlation with high life satisfaction and if so, which ones?

2. Do different levels of demographic variables such as age, sex, marital status, education, income, etc. show a difference in degree of life satisfaction?

3. Do different levels of psychological variables such as degree of religious belief, perceived childhood and marital happiness etc. show a difference in degree of life satisfaction?

Organization of the Study

Chapter 1 has presented an introduction to this investigation into aging by outlining the need for more information in this area, suggesting some of the reasons why research should be done and why it has not been done. The purpose of the study has been presented as well as the general organization of the succeeding chapters.

Chapter 2 will review the related literature on personality, age-related personality changes and some theories of adult development. Theories of optimum aging, the concept of life satisfaction and the pro-

blems of cross-sectional vs longitudinal research will be presented. The chapter will conclude with a brief description of some famous and local aging studies.

Chapter 3 will describe the sample and its limitations, the instruments used, the data collection and the methods of administration of the questionnaire.

Chapter 4 will present the research findings and additional findings.

Chapter 5 will contain a summary of the study, a discussion of the findings and some implications.

Chapter II

Related Literature and Research

In this chapter some of the relevant research and literature on personality with both its static and dynamic aspects in the aging person, will be presented. The current theories of adult development and psychosocial theories of optimum aging will be discussed as well as the concept of life satisfaction. The problems of cross-sectional and longitudinal research and a brief listing of important American aging studies and some local investigations will complete the chapter.

Personality

Personality has been defined in many ways and not only reflects the theorists' belief in the nature of man but also determines the methods and kind of research that he does. As this study will attempt to examine the personality of an aging population in terms of personality traits the definition of choice will be one favored by psychometricians such as Raymond B. Cattell who sees personality as "that which permits a prediction of what a person will do in a given situation" (Cattell, 1950).

The idea that a person's personality is composed of a number of consistent traits or predispositions to act in a habitual way in similar circumstances is not new, as the ancient Greeks saw man as tending to respond to his environment in one of four characteristic ways. They believed, and the idea persisted until the beginning of this century, that everyone could be classified as either melancholic, choleric, phlegmatic or sanguine. In the 1930's, Gordon W. Allport working at Harvard de-

vised a theory of personality which can be considered a "trait" theory. He believed that although the personality was continually adjusting and changing in the light of its internal and external environment, there was a basic consistency made up of personality traits that bound it together (Allport, 1937). Allport saw the trait as "a neuropsychic structure having the capacity to render many stimuli functionally equivalent, and to initiate and guide equivalent (meaningfully consistent) forms of adaptive and expressive behavior" (1961, p. 347). He believed that the infant was "a creature of heredity primitive drive, and reflex existence" and that over time and influenced by the pleasure-pain principle, and the Law of effect, the salient aspects of his personality - his traits, begin to develop (Hall & Lindzey, 1970). Allport and H. S. Odbert (1936) compiled a dictionary of over 4,000 terms used in literature to describe personality traits in the belief that valid behaviors must have their verbal symbols in the language. It was from this list with the addition of psychiatric and psychological terms from scientific literature that Raymond B. Cattell by sorting, condensation and analysis of synonyms derived the factors that he used as a starting point for his factor analytic theory of personality.

A. Cattell's Multivariate Factor-analytic Personality Theory. Cattell sees the personality as composed of traits as the basic unit. These traits which are a behavioral tendency to react similarly across situations, are of two types. There are surface traits which superficially appear to be a cluster of similar behaviors that go together,

can be delineated by subjective methods and are rather like the common descriptions of character traits. He has delineated about 35 such trait clusters which are seen more as how personality works than the basic underlying structure. The basic unit of personality is the source trait which can only be derived from factor analysis of surface traits. Source traits are seen as more important than surface traits and "the real structural influences underlying personality" (Cattell, 1950, p. 27).

There are three kinds of data from which these source traits can be discovered and Cattell feels that the results from the three sources of data should agree to a large extent. L-data is derived from the life records of the person such as school grades, criminal convictions, employment history, etc. Q-data comes from the subjective responses of the individual to questionnaires and O. T data is derived from objective tests whose purpose is disguised from the subject. Sixteen source traits have been isolated and this is the principle underlying the well-known 16 PF inventory of personality factors. The personality factors are thought to provide the continuity and stability of the person over time although responses to specific situations will be moderated by the effects of mood and roles. Both heredity and environment are important in the development of the structure of personality (Cattell, Blewett, & Beloff, 1955) and it is the interplay between these two factors which results in the unique blend of traits that makes up the individual. Cattell has also investigated age trends in personality and has concluded that much of the basic formation of the personality has

occurred by age seven and that the same traits are consistently found from childhood to maturity (Coan, 1966). Cattell believes that personality consistency is produced by the traits which are relatively stable over time although he allows that change can occur in personality through learning, maturation, and fluctuating states of the organism. In psychotherapy, by means of the learning process, certain traits such as anxiety and neuroticism are capable of significant modification.

Dr. Edgar Howarth of the University of Alberta published the Howarth Personality Questionnaire derived from factor analytic methods which he feels has improved on the number of significant inter-item correlations of the 16 PF (Howarth, Browne, & Marceau, 1972). The Howarth Personality Questionnaire was used in this study to delineate 10 putative personality factors in the sample.

B. Age Related Personality Change. There are many conflicting views as to the relative stability of the personality over the entire life span. Many writers mention the continuous aspects (Chown, 1968; Gottesman, Quaterman & Cohn, 1973; Maddox, 1968; Murray, 1948; Tuddenham, 1959) while others have investigated the areas of change (Becker, 1968; Erikson, 1950; Kuhlen, 1968; Neugarten, 1968; Worchel & Byrne, 1964). It would appear that the personality has some aspects which are relatively stable such as self descriptions (Byrne, 1966; Kelly, 1955; Woodruff & Birren, 1972), cognitive style (Mischel, 1968; Witkin, Goodenough & Karp, 1967). These areas of personality continuity are referred to by Bengtson (1973) and Birren (1964) as the

"overt" personality processes that are related to the social system and are seen as fairly continuous and stable over time. The covert process on the other hand shows a considerable amount of age related change.

1. Increased introspection of the personality. As an individual ages there appears to be an increase in the tendency to introspection and self-reflection (Neugarten, 1968). Environmental events are reflected upon in the light of lengthy experience and there is a continual sorting and sifting of judgments about life events. In the very old, this introspection is often carried on aloud either with or without a respondent and constitutes what Butler (1968) refers to as the "Life Review", a universal process wherein a person reminisces, and reconsiders his life and strives to achieve order and serenity and a purposeful view of his life. The beginnings of this increased interiority of psychological life may coincide with a gradual loosening of the psychosocial bonds with others, a process described by Cumming and Henry (1961) as a natural process of disengagement from life, to be discussed later.

2. Shift from active to passive mastery. Gutmann (1964) using T.A.T. cards rated the responses in three categories of functioning in the environment. Active mastery represents the viewpoint that the individual can cope with, and master the stresses and strains of life as presented by the environment. The individual feels that boldness and risk taking will likely be rewarded with success. Passive mastery sees the world as complex and potentially dangerous and one must conform and

adjust to its demands. A later stage described as magical mastery occurs in late life which involves projective rather than instrumental revisions of the world and the self. In this latter stage primitive defensive operations of projection and denial seemed to substitute for realistic activity (Gutmann, 1964). In order to determine whether these results were confined to North American culture Gutmann (1969) examined four other widely divergent societies and found that the changes were more age related than culturally related. This gradual shift from active to passive to magical mastery over time is thought to reflect a decline in ego energy with age (Rosen & Neugarten, 1964).

3. Age-sex changes. There is evidence that some of the changes that occur over time are not perceived as the same for both sexes in terms of roles nor are the actual changes the same for both men and women. Neugarten and Gutmann (1968) using T.A.T. cards found that the older the respondent the more likely he was to perceive a decrease in the authority of the male in the household whereas the female was seen in a more forceful and dominant role. It is not known whether this role perception reflects actuality or not. Males were also seen as becoming more tolerant of their "nurturant and affiliative impulses" whereas women as they grow older become more tolerant of their own "aggressive, egocentric impulses" (Neugarten & Gutmann, 1968, p. 77).

Both sexes are seen as becoming more interested in introspection, and as self preoccupied and concerned with the meeting of

their own needs (Neugarten, 1964).

Some Theories of Adult Development

As mentioned in Chapter I relatively few psychologists have attempted to study the development of the human beyond early adulthood. There are many comprehensive studies of the psychological development of the child, the adolescent and somewhat fewer of the young adult. However, mention should be made of some theories which encompass the entire life span although it is beyond the scope of this report to do other than briefly summarize their content and thrust. Most of these theories are of the introspective kind and are based on clinical and empirical observations rather than experimental research. Most theories see the individual as progressively and sequentially going through a series of tasks or crises and that the success of the resolution of one crisis or tasks has an influence on future adjustment.

A. Carl Jung (1875-1961). Jung saw life as divided into three stages in terms of the development of the self. He believed that the development of the child's psyche is natural and uncomplicated for the child and only represents a problem for the child's caretakers, who may wish to try to change some direction this development is taking. The period of youth which stretches from puberty to 35 or 40 years is the time when the individual must deal with his sexuality, his sense of inferiority-superiority and produce an expansion of his life space. The adult years which extend onward from 40 were to Jung, the most interesting period. He believed that there must be a radical change of goals

from early life's expansionary interests to an increasingly narrowed interest in the self and its development. The last third of life should be devoted to the goal of "knowing oneself." The goal is to be attained or at least striven for by introspection and the use of religion to dwell on acceptance of death and the life after death rather than its denial. Only if one accepts these inevitable consequences of life can one live fully in the present (Jung, 1933).

Although his theory was introspectively derived it is interesting to note that he described a number of characteristics of the last third of life which have since been confirmed by empirical studies. He described an increasing introspection, greater rigidity, particularly of moral convictions with age, and an increase in masculinity in women and vice versa (Jung, 1933). Recent work by Neugarten and Gutmann (1968) using projective methods have also shown increased introspection, rigidity and some reversal of the sex roles to be present.

B. Charlotte Buhler. Charlotte Buhler after an analysis of 202 biographical studies of outstanding people developed a theory of personality development over time in terms of the principle of "intentionality." Intentionality refers to the fact that she believes a person lives their life according to their intention to pursue certain goals. Life is divided into five stages with differing goals, and by later life a person is usually able to verbalize whether or not these goals have been fulfilled. Before approximately age 15 no specific goals have been formulated. From 15 - 25 there is a period of preparation and tenta-

tive exploration of goals whereas from age 25 - 50 the life goals are set and developed. From age 50 - 65 there occurs a period of assessment of success or failure in goal-attainment and major adjustments are still possible for the healthy individual. Feelings of fulfillment or failure are generated during this period and the beginnings of the realization that the individual's power to make major changes is waning. The last stage is the post self-determination period where strong new goals are generally absent. The individual may look back with reasonable contentment at his life and enjoy "resting on his oars." On the other hand if few self-set goals have been achieved (in the eye of the beholder) there is a feeling of resignation or at worst despair for lost opportunities (Buhler, 1968).

C. Else Frenkel-Brunswik. E. Frenkel-Brunswik, who was a student of Buhler, also sees life as being divided up into five periods but she does not see the intentionality and goal pursuit as much as a gradual unfolding of potentiality followed by a gradual but inevitable contraction and decline. The first three periods up to age 30 are of building, expansion and development. The last two stages are characterized by physical and psychological decline leading to depression and contraction of interests and ability. Interestingly, she places the peak of powers at 30 years which is much earlier than other theorists or what empirical evidence is available suggests (Frenkel-Brunswik, 1963).

D. Robert J. Havighurst. Havighurst has offered the theory

of "developmental tasks" which must be achieved sequentially throughout the life span in order for the person to progress to the next stage. These tasks range from learning to communicate in early life to "achieving adult civic and social responsibility" and "developing adult leisure time activities" in the mid-life period (Havighurst, 1953).

E. Erik Erikson . Erikson, strongly influenced by psychoanalytical theory has devised a system describing man's ego as progressing through eight stages. There is a conflict point at each one of these stages and the choice of resolution of the conflict will influence the adjustment that is made at each successive stage. Resolution of the conflict is not made on a "once and forever" basis but must continue to be dealt with at later stages. An example of the ongoing nature of the crisis is the young person's need to establish intimacy with another human being. This need then persists throughout life and is resolved both in the light of the original disposition of the crisis and in new adjustments to the social environment. During childhood the child must develop a basic trust or mistrust in others, a basic belief or doubt in his ability to cope with his world, a sense of the goodness of his own initiative and a belief in the adequacy of his efforts to achieve. As an adolescent he must deal with his own sexuality or suffer "role confusion." Later he must develop the ability to allow another person to enter his private world (Erikson, 1950).

The seventh developmental task occurs during middle adulthood and is termed "Generativity vs Stagnation." Erikson sees this

stage as a crisis between whether the individual will become involved in guiding or training the young generation or whether the person will become enmeshed in themselves. He suggests that the latter resembles becoming one's own, only child, with a resultant decline into self-concern and hypochondria. The bearing and raising of children alone, neither guarantees, nor its absence precludes, the successful resolution of this stage. A childless person who has a concern for future generations (as a teacher, or child care person), or in actively supporting improvements in the future, has made a healthier decision than the parent of many, who becomesmore self-concerned than future oriented.

The final stage termed Ego Integrity or Despair is concerned with the person's evaluation of their life in terms of meaningfulness and inevitability. If one feels that most events occurred and were dealt with in the best way they could be, a sense of the integrity of one's life as real, orderly and fulfilling results. If, on the other hand, one feels that there were many lost chances and many wrong turnings, a sense of despair signified by a fear of death ensues. The feeling is that there is now too little time to institute any changes and the inevitability of death leaves one with nothing but regret. Erikson feels that these stages are universal as "a wise Indian, a true gentleman, and a mature peasant, share and recognize in one another, the final stage of integrity."

F. Robert C. Peck. Peck (1968), in general agreement with Erikson's eight stages of the life cycle felt that as at least seven of

these stages could be relegated, in some lives, to the period of young adulthood that a further refinement and delineation of the crucial issues of middle and late adulthood was needed. He subsequently evolved seven tasks, learnings or adjustments that should be made in these two life periods and they represent an increase in specificity over Erikson's final stage of generativity vs despair.

(a) Middle Age

(i) Valuing Wisdom vs Valuing Physical Powers. With the inevitability of the decline of physical prowess those individuals who are able to put an increased investment in their mental capacities derived from experience and their native ability will fare better psychologically than those who resent and chart each physical decrement. He feels that this reliance on physical powers as the chief means of adjusting to life results in depression and an increasing inability to gain satisfaction from life. Whereas if one's self evaluation is changed from the "hands" to the "head" orientation, satisfactions continue.

(ii) Socializing vs Sexualizing in Human Relationships. If men and women can be seen as individuals, companions and friends with a lessening of the sexual component in the relationships a less egocentric orientation is provided that enlarges the possibility for satisfying interaction. Other people would be seen more as individuals and less as sex objects.

(iii) Cathectic Flexibility vs Cathectic Impoverishment. As one proceeds into later age a large number of valued persons

and roles often disappear either through death, retirement or changing circumstances. The ability to transfer one's emotional investment from those people and positions no longer existent, to those that are available is important for psychological health. This shifting of cathexes from lost sources to available ones also encompasses changes in existing relationships, as when one redefines the relationship with a grown son or daughter.

(iv) Mental Flexibility vs Mental Rigidity. Although this is often noted as a development of old age Peck feels that it has its roots in middle age when a person having lived through many varieties of experience, begins to feel that the answers are contained in these experiences only and will forever afterward provide the rules for their behavior. He feels that psychological health lies in being willing to see these as provisional answers that may have to be adjusted in other times and circumstances.

(b) Old age

(i) Ego-differentiation vs Work Role Pre-occupation. If one derives one's feeling of self-worth only or even primarily from occupational roles whether they are engineering or motherhood, at retirement when the role ceases, one will be plunged into loss of self-esteem and a lowered self-concept. Peck suggests that a "varied set of valued activities and valued self-attributes so that one of several alternatives can be pursued with a sense of satisfaction and worthwhileness" is necessary for ego differentiation and good adjustment.

(ii) Body transcendence vs Body Pre-occupation. If one values body comfort and function as essential to happiness, old age is certain to contain many disappointments. A surprisingly large number of elderly people in frail and uncertain physical condition seem to largely disregard this area of life in favor of a concentration on social relationships, and mental sources of pleasure which often increase with age.

(iii) Ego Transcendence vs Ego Pre-occupation. The inevitability of death is often envisioned for the first time in old age and Peck feels that one way to transcend one's own personal ego is to work for a legacy in the future beyond one's death. By children, by contributions to the improvement of society, by one's work and by friendships one can live beyond one's personal death.

G. Other Theories of Development. There are several other theories of development which do encompass the adult end of the life span but are not as germaine to this report as those mentioned above. Maslow (1968) postulated a hierarchy of needs with self-actualization as the highest development but his stages are only faintly age-related and the highest development is not thought to be reached by many. Similarly Loevinger's stages of ego development with its final achievement of "integrity" (Craig, 1976) and Kohlberg's moral development stages culminating in the sixth stage of the "universal ethical-principle orientation"(Kohlberg, 1969) are not within the reach of the majority. More recently in a popular book Gail Sheehy (1976) drawing heavily on

Jung, Erikson and Neugarten, presents an updated version of the stages of man which is enlivened by modern examples but is more report than investigation.

Psychosocial Theories of Optimum Aging

A. Disengagement Theory. The folklore has always contained advice (usually contradictory) on the best way to grow old and octogenarians and those older are usually questioned as to what they would attribute their long and happy life. In 1960, Cumming, Dean, Newell and McCaffrey first published a tentative theory of optimum aging from working with data gathered in the longitudinal study known as the Kansas City Studies of Adult Life. This theory was called Disengagement Theory and in 1961 a book was published (Cumming & Henry, 1961) with elaboration and revision of the original theory. The Disengagement theory states that as a person ages, they experience a desire to withdraw from many roles previously held and to also withdraw from other people into increased introspection. This gradual disengagement by the person coincides with societies' wish to withdraw from the aging individual, as one who is soon to die, and must be replaced in roles and positions with as little trauma to the smooth functioning of society as possible. This functionalist theory sees mutual withdrawal as necessary for society and an individual who gradually and voluntarily withdraws himself is an optimum ager. According to this theory an individual who sought to remain active in work, social relationships and community activities would be a problem ager. There is much evidence to show

that a process of mutual disengagement does occur with the declining strength of the older person. Increased self preoccupation of the personality (Neugarten, 1968), loss of energy, sensory problems such as loss of hearing all contribute to making the individual wish to drop roles and relationships (Botwinick, 1973). Forced retirement, death of spouse and reduced income tend to further reduce the older person's options in reaching outward. Disengagement theory states that the individual must welcome and accept these changes in order to age successfully. While most theorists accept that such a process does occur they quarrel with whether it is a natural and normal component of aging. Cowgill and Holmes (1972) point out that it is not a universal phenomenon as in many primitive cultures it does not occur, and the aged remain fully engaged although in changed and perhaps less physically strenuous roles until death. In modern industrialized society disengagement is forced upon many who would prefer to remain active and involved (Havighurst, Neugarten & Tobin, 1968). Maddox and Eisdorfer (1962) conducted a study in which they examined the relationship between a person's activity and their morale and found a positive correlation. A later study (Maddox, 1965) did show however that as age increased activity decreased although morale often remained high. The critics of disengagement theory feel that it is not universal, that although it is a process that occurs, it is not a theory of optimum aging although for some individuals disengagement may be fulfilling. The previous personality pattern is the pivotal factor which determines whether this will

be an aging pattern of high or low morale, as some individuals who have always enjoyed a low degree of activity and social interaction will continue to do so (Havighurst, et al., 1968).

B. Activity Theory. The activity theory is the one most commonly held, particularly by those who work with the elderly, either in institutions or in other helping capacities, and is usually the basis for governmental action. It postulates that to maintain high morale until the end of life one must be as involved in as many roles and relationships as possible. When retirement or death of loved ones removes certain roles, substitute roles and relationships must be found (Havighurst, 1963; Havighurst et al., 1968; Lemon, Bengtson & Peterson, 1972; Miller, 1965; Williams & Worths, 1965).

A major criticism of this theory as a guide for optimal aging in the later years is that it seems to require that people remain middle-aged in character - involved and active - and to actually be denying the latest stage of life as a discreet phase in itself. Many people cannot maintain this active middle-aged role and this theory would see them as unsuccessful agers. However, a study by Cottrell and Atchley (1969) points out that few elderly women including those over seventy see themselves as more than "middle-aged" and this would appear to confirm the view that the elderly woman at least, wishes to retain the characteristics of middle age if possible.

If a person is disengaged from relationships with others the possibility of having a person in whom one can confide would certainly

be less than for the individual who is fully engaged with others. Lowenthal and Haven (1968) in a study of 280 older persons found that those with a confidant, were less likely to be depressed and to be less negatively affected by loss of spouse or jobs than those who did not have a stable intimate relationship with anyone. Interestingly, the presence of a confidant did not act as a psychological buffer against the loss of morale in the development of a serious illness. This theory although also very popular today, does not serve as an adequate theory because it does not encompass all people who are aging successfully, at least from their own perceptions and from measurements of their morale. There are those, who continuing a lifelong pattern, are not engaged in many roles and activities and who do not have a wide circle of intimates yet are still happy and contented with their lives.

C. Role Exit Theory. Blau (1973) suggested the Role exit theory which is a sociological variant of the activity theory. She suggests that as one ages, various roles are dropped from necessity or choice, (e.g. retirement, dropping of organization membership, widowhood, etc.) and a sense of loss of self-esteem results unless substitute or similar roles are found. If the role losses are too frequent or too close in time the result for the individual in terms of satisfaction with life are serious. One can be "snowed under" by loss after loss and not possess the ego strength to combat the losses by substitution.

D. Continuity Theory. Neugarten (1964) and Atchley (1971) suggest that the ability to continue in the habits and preferences and

associations built up over a lifetime even into later old age produces a sense of satisfaction in the elderly. The somewhat uninvolved withdrawn young individual will probably mature into the disengaged withdrawn older person and may experience considerable satisfaction from a life-style which he has chosen. On the other hand the gregarious, active young person will age to resemble the successful model of the activity theory. The personality and life style of the individual will be relatively unchanged if he can achieve this continuity. Because of the interaction between biological, psychological and sociological factors however, change is possible, and there is no one direction that all people must take. There is a difficulty in conceptualization of this theory because the possibilities of variation are infinite but it does appear to be a more universal explanation. However, to date it has not generated as much research as has either the disengagement theory or the activity theory.

E. Personal Action System Theory. The personal action system was developed by Williams and Wirths (1965) as an outgrowth of their work in the Kansas City Study of Adult Life. They proposed that there are two vital factors in successful aging. The first factor is seen as the balance of an exchange of energy between the person and his environment and is referred to as autonomy. If he puts more energy into the system of his personal environment in terms of the goals and aspirations of his significant others, than they are required to put in, to keep the system in balance, he is said to be autonomous. If the

people who care for him are required to put forth the major energy input for balance, he may be said to be dependent. Although this balance of input-output is particularly important in the affective area it also refers to wealth, power, ability for decision making and recognition by others.

The second factor is the stability of the system in relation to the autonomy-dependence continuum. A judgment must be made as to whether the continuum is stable or precarious. Will the system persist as it is for a relatively long time, or is it in danger of collapse? The most successful agers are those with an autonomous persistent system followed by autonomous precarious, dependent persistent and finally those whose system is dependent precarious and are most unsuccessful and likely to be found as institutionalized or suicided agers.

F. The Adaptive Tasks of Successful Aging. Clark and Anderson (1967) involved in the Langley Porter Institute Studies in Aging in San Francisco over an eight year period of investigation of aged people requiring institutionalization suggest that there are five adaptive tasks that must be accomplished for successful aging. They distinguish between the developmental tasks of Buhler (1968), Erikson (1950) and Havighurst (1952) which are faced by everyone as they mature regardless of the culture in which they reside. Adaptive tasks "depend upon the value system of the prevailing culture ... they are a set of culturally-derived demands placed on modern aging Americans" (p. 392): These five tasks are:

1. Perception of Aging and Definition of Instrumental Limitations. This task involves the acceptance of the reality that one is aging and that certain activities and roles, will of necessity, be curtailed. It suggests that one need not like aging nor the prospect of relinquishing roles and activities but the reality must be faced rather than denied.

2. Redefinition of Physical and Social Life Space. As changes occur with age, the individual must be able to sort out and redefine those areas of his environment where he is still capable of control. It may involve withdrawal from some areas, delegation of authority in others and sometimes a lessened social life space.

3. Substitution of Alternative Sources of Need Satisfaction. This is similar to Peck's (1968) Cathectic Flexibility in that there must be a continual substitution for losses caused by death, infirmity, role exit, etc. This involves a willingness to seek out substitutes and to allow them to meet the individual's needs.

4. Reassessment of Criteria for Evaluation of the Self. If the individual's self-worth is inextricably tied to his occupation, inevitable loss of occupational role may be devastating. There is a tendency in our culture to value only the worker and the producer (Tournier, 1971) and the person who is excluded from these roles by age will inevitably feel a lowering of self-concept. The enjoyment of the prospect of the leisure years conflicts with the economic and work ethic of our culture and the retiree must learn to value persons and himself for

other than their economic productivity.

5. Reintegration of Values and Life Goals. The older person must see himself and his place in society as valued rather than as a useless cast-off waiting for death. He has to develop a feeling of the meaning and purpose for his life. Clark and Anderson found that mental status and success in adaptation tasks were highly correlated although there were community people who were having difficulty and there were some institutionalized who appeared to have come to terms with the adaptive tasks. In the institutionalized sample the task representing the most difficulty and creating the most distress was the need to find substitute sources for need satisfaction (54% of sample). They point out that although substitution is the most crucial ability it is also the one most dependent on the social system rather than one's own personal skills.

The Concept of Life Satisfaction

In the last two decades there has been considerable interest in the psychological well-being or general morale of the older person (Cavan, Burgess, Havighurst & Goldhammer, 1949; Cumming & Henry, 1961; Havighurst & Albrecht, 1953; Kutner, Fanshel, Togo & Langner, 1956). Henley and Davis (1967) see general life satisfaction as "a perceived state of mind that reflects relative contentment and freedom from anxiety and is reportable qualitatively by patients" (p. 65).

Early studies (Havighurst & Albrecht, 1953; Havighurst, 1957) concentrated on what Havighurst (1963) refers to as an outer or be-

havioral entity which was derived from the observable behavior of the older person and rated on a scale by a trained psychological observer. It was largely a measure of the social acceptability of their behavior and might not be highly correlated with how they felt about their life. Although it may be related to the outward social approval factor, researchers feel that an inner subjective measure may have more validity in determining life satisfaction (Kutner et al., 1956; Lawton, 1973; Meltzer, 1963; Neugarten et al., 1961; Volinn & Spielholz, 1969). They feel that the individual himself is the best judge of his own happiness and satisfaction and is able to communicate this by his answers on a questionnaire.

Neugarten et al. (1961) feel that positive life satisfaction has at least five components and an individual will be judged to be well adjusted and have high life satisfaction if he:

(a) takes pleasure from the round of activities that constitutes his everyday life;

(b) regards his life as meaningful and accepts resolutely that which life has been;

(c) feels he has succeeded in achieving his major goals;

(d) holds a positive image of self; and

(e) maintains happy and optimistic attitudes and mood. (p. 137)

These five factors of zest vs apathy, resolution and fortitude, congruence between desired and achieved goals, positive self-concept, and

mood tone have been operationalized in the Life Satisfaction Index (Neugarten et al., 1961). One of the main purposes in attempting to operationalize a measure of life satisfaction is to have an instrument to use for a criterion of successful aging. The L. S. I. has been used in studies to examine the disengagement theory and the activity theory as models of successful aging. Some studies show that high activity and involvement are highly related to life satisfaction (Lemon et al., 1972; Maddox & Eisdorfer, 1962) whereas other studies show that people who have chosen and are continuing an increasingly disengaged lifestyle may also be high in life satisfaction (Lowenthal & Boler, 1965). Reichard, Livson and Petersen (1962) found three personality types which had high life satisfaction and could be termed successful agers. These diverse types were labelled active, passive and mature, which once again points out the shortcomings of the activity and disengagement theories as criteria of successful aging. A study by Kurtz & Wolk (1975) used the life satisfaction index with elderly subjects and found a significant relationship between developmental task accomplishment and life satisfaction. It appears that life satisfaction is less dependent on high activity or disengagement, but rather on the continuance of the habits, preferences, personality and lifestyle developed by the individual over time (Havighurst, Neugarten & Tobin, 1968; Maddox, 1968; Neugarten, Havighurst & Tobin, 1968).

Cross-sectional vs Longitudinal Research

When an investigator wishes to study changes in the organism

over time, he is faced with the decision of choosing either cross-sectional or longitudinal research. Cross-sectional research involves testing individuals of different ages at the same point in time. Changes in the observed quality would be considered to be due to the passage of time. The advantage of cross-sectional research is that it is cheaper, more convenient, and more quickly completed. However one of the main problems attendant on this type of research is that a somewhat false picture may be obtained in that one gets "age differences" rather than "age changes." Age differences, which refer to the differences between individuals of varying ages, may be more a factor of cultural change than of a change due to aging per se (Bromley, 1966). If one compares a twenty-year old's performance with that of a sixty-year old the differences may be due as much to the very different environment in which each has lived as to their age differences. The sixty-year old, due to differences in education, health, nutrition, etc. may not at age twenty have been at all similar to the current twenty-year old.

An approach which tries to correct this problem is the longitudinal study which examines the same individual at various points in the life span. The changes that are observed here are referred to as "age changes" as they are thought to be more likely the result of the passage of time in the individual. There are problems with longitudinal studies as they are expensive, time consuming, present difficulties in keeping research staff and subjects available and can tie a researcher's

time and effort with the publishable results always far in the future. Although longitudinal studies are less likely to confound the influences of age and culture than cross-sectional studies, there is an element of confusion here also (Botwinick, 1973; Kuhlen, 1963). An example of the problem of confusion of time of measurement and age is shown by Nelson (1954) when he tested college students for "liberalism." He retested these subjects 14 years later and found an increase in liberalism which one might be tempted to attribute to a change in values with age. However he also tested a group of current college students and found their scores on liberalism were higher than those of the original college sample. A change which appeared to be age related was actually related to a change in the mores of the time of measurement (Schaie, 1965, 1967). Botwinick (1973) points out that Schaie's "time of measurement" concern should be broadened to include such factors as the practice effect (where the subject is becoming familiar with a repeated test), changes in motivation and interest, and changes in reaction to different interviewers necessitated by the lengthy time span of the study.

Schaie (1967) has proposed a model that would hope to eliminate some of these problems. The three sources of variation in developmental change, age, cohort (total population of organisms born at the same point in time) and time of measurement changes are all considered in his three component model.

Examples of a Set of Samples Permitting All Comparisons Deductible from the General Developmental Model

Time of Testing		1955	1960	1965
Time of Birth (cohort)	1910	Sample 3 Age 45 $A_1C_3T_1$	Sample 5 Age 50 $A_2C_3T_2$	Sample 6 Age 55 $A_3C_3T_3$
	1905	Sample 2 Age 50 $A_2C_2T_1$	Sample 4 Age 55 $A_3C_2T_2$	
	1900	Sample 1 Age 55 $A_3C_1T_1$		

A - age level at time of testing

C - cohort level being examined

T - number of tests in the series

If you compare samples 1, 2 and 3 you will have cross-sectional data that will likely yield age differences. A comparison of samples 3, 5 and 6 will give longitudinal data revealing age changes. If you then examine samples 1, 4 and 6 it should be possible to discover the differences among generations or the environment or both, independent

of the age factor. Schaie and Strother (1968) used this cross-sequential method to investigate age changes in cognitive behavior and were able to determine those factors that were age related and those that were likely environmental or genetic change effects. The use of this method may help to begin to sort out the conflicting findings from previous cross-sectional and longitudinal studies of aging.

Some Important Studies

1. Berkeley Growth Study. In 1928 the Berkeley Growth Study was begun in California at the Institute of Human Development. It was designed to study in depth, children and the parent-child relationship. In the course of this study a large amount of data on the parents was accumulated although the focus of the study at that time was the child. In 1958 a follow-up study was done and in the early 1960's it was decided that the very complete data on the parents, now on average in their seventies, could form the basis of a longitudinal study of adults ranging over forty years of their life span. One hundred and forty two parents with complete records were located and agreed to participate. The final data was gathered by means of a 37 page interview schedule which was tape recorded for later analysis. The subjects were categorized according to their life style. Some of their more interesting findings include evidence that there is no massive decline in psychological functioning with age and that there seems to be considerable continuity of personality throughout life, particularly for the mothers in the study. It seemed to be the most negative aspects of personality

(e.g. anxiety, depressed mood, etc.) that had the greatest stability and led the researchers to postulate that it is not old age per se that introduces problems but that life-long problems tend to be exacerbated in old age. The continuity of life style was more apparent in the fathers with some women showing different life styles at different points in the life cycle. These researchers feel that a person must be studied in the context of their entire life span rather than just as aged persons (Maas & Kuypers, 1974).

Also at the University of California, Berkeley, a study of aging and personality was undertaken in 1957 in the Institute of Industrial Relations. The purpose of this study was to assess the role played by personality in the adjustment to growing old. Under the direction of Dr. Else Frankel-Brunswik 87 men ranging in age from 35 to 84 were interviewed on an average of nine hours using a semistructured technique. Eleven psychological tests were administered requiring three more hours with the entire interview broken up into two hour segments. On the basis of good adjustment to aging the men were divided into five personality groups. Three groups with similar personality characteristics, the "mature", the "rocking-chair men" and the "armored" were judged to have aged successfully, and two groups, the "angry" and the "self-haters" were seen as unsuccessful agers. They found that some aged people had greater self-acceptance than they had had previously, that the real crises for men occurs at retirement and if they survive and adjust well, then later years are less stressful. They also suggest

however that people who survive into old age may be psychologically stronger than those who do not. Personality is seen as the pivotal factor in adjustment and good adjustment is less dependent on how active one is and more on whether one's activities meet lifelong needs.

2. Kansas City Study of Adult Life. This famous study is a result of the collaboration of the National Institute of Mental Health and the Committee on Human Development of the University of Chicago. Much of the well-known work in the field of gerontology is derived from this study. A few examples follow.

(a) Disengagement Theory which was probably the first formal theoretical explanation offered for successful aging was first proposed by Cumming and Henry (1961) and while not universally accepted has generated considerable research.

(b) Lives through the Years (Williams & Wirths, 1965) is a continuation of the report by Cumming and Henry and consists of data gathered from 168 cases over a five and a half year period. The purpose was to investigate social life space, disengagement, life satisfaction, personality type and patterns of aging. Their autonomous-persistence categories of successful aging have been discussed previously. They delineate six types of lifestyles: familism, couplehood, living fully, world of work, living alone and easing through life with minimal involvement. The first three styles are highly successful and the last three reflect withdrawal, anomie and alienation. Drs. R. J. Havighurst and B. L. Neugarten (1964) are also associated with the

Kansas City Study of Aging and are among the most prolific and influential theoretical gerontologists in the field.

3. Langley Porter Institute Studies on Aging. The Langley Porter Neuropsychiatric Institute Studies on Aging have been involved in a process of research on aging since 1959. Their particular focus is on the problems of the elderly with psychiatric difficulties.

(a) Aging and Mental Disorder in San Francisco (Lowenthal & Berkman, 1967) is a social psychiatric study of 600 elderly community residents who were compared with 534 institutionalized elderly over a two-year period. They found that a considerable number of psychologically impaired individuals manage to remain in the community, that there is a tremendous problem in categorizing normal and abnormal and that psychological impairment increases with age. The failure to achieve self-actualization and the realization that there is too little time remaining are thought to be factors in mental breakdown.

(b) Culture and Aging (Clark & Anderson, 1967) is a report on the adaptation to the aging process using the survivors of a group of 1,134 subjects selected by the Langley Porter Institute for longitudinal study. As in the previous study approximately half were drawn from the community and half from a psychiatric institution. The adaptive tasks formulated by Clark and Anderson have been described earlier.

Local Studies from the Psychological Perspective of Aging Populations

Third Career Research Society Report. In 1973 with funding

from the Provincial Government the Third Career Research Society undertook a study of senior citizens who were heads of households. The areas investigated included attitudes to retirement, personality and retirement satisfaction, and satisfaction with retirement generally. One thousand interviews were conducted with approximately half the subjects from urban and half from rural Alberta.

Operation New Roof. Under the direction of Dr. Earle L. Snider of the University of Alberta a study of older people's satisfaction with their housing was conducted. This study was funded by a New Horizon's Grant and carried out by "The Group of Ten" - a senior citizen's group using a sample of 300 people over 65 years. They found that people who lived independently tended to be most content and that all expressed a wish to remain in their own homes as long as possible.

Future Commitments Study. D. Schonfield of the University of Calgary has been conducting studies into the role of future commitments as an associate of successful aging. In a study of 100 non-institutionalized females over 65 years of age (Schonfield, 1973) he found that there was a significant correlation between the planning of future activities and life satisfaction. Schonfield and Hooper (1973) found that scores on successful aging and future commitments were lower for an institutionalized sample than for a community sample.

In summary, it can be seen that there are an increasing number of theories on the process of aging, optimum aging and how to study these processes. As is common in any new discipline there are con-

flicting theories, e.g. the disengagement and activity theories of optimum aging, and yet considerable agreement on principles within different theories, e.g. Erikson (1950) and Peck's (1968) ego development theories. A common thread appears to run throughout — that the personality of the individual is the major factor in aging successfully with lesser importance ascribed to environmental influences.

Chapter III

Method

General Description of the Study

As the purpose of the study was to gain information about a number of facets of the social and emotional life of senior citizens in the city of Edmonton it was decided to follow Allport's injunction that when you wish to know how people feel about something you should go and ask them. A questionnaire was designed which included demographic information, a personality inventory, a life satisfaction index and a number of open-ended questions on such areas as social activities worries, future hopes, feelings about retirement, etc. A small pilot study using 10 volunteers from the University of Alberta 1976 Spring Session for Senior Citizens University Program was conducted and some adjustments were made in the method of presentation of the questionnaire. The larger sample (chosen by the method to be described later) consisted of 81 individuals. These were contacted and the questionnaire interviews conducted on an individual basis by the writer during 1976-77. The descriptive material which had then been gathered was transferred to punch cards and analysed using the computer and programs at the Division of Educational Research Services.

The Pilot Study

The Spring Session, University of Alberta Senior Citizens' Program was approached for permission to ask some of their participants to complete the Questionnaire to determine any severe problems

that might exist in length, format, etc. The purpose of the study was explained to them individually and 12 students volunteered to do the questionnaire. Four students exhibited some hesitation as to whether they would be capable of understanding what was required, but were willing to try. The questionnaires were taken home by the students to be returned in the next few days to Liberal Studies Division or to be mailed back in the stamped self-addressed envelopes provided. Three students phoned the writer to ask for clarification on the meanings of certain questions. All of the questionnaires were returned but only seven were complete and correctly answered. Four had missed one complete page (leaving it blank) and three had missed individual questions or apparently misunderstood them. A number of students, including those who had returned complete questionnaires, said that they would have enjoyed it more if they had had someone to discuss the various questions with, as it was a long time since they had done anything like that. Although this was a selected group of seniors, in that they were interested enough in intellectual pursuits, to enroll in a university program, they seemed to experience the following difficulties:

(1) Anxiety about doing it well.

(2) Anxiety about an exact understanding of the thrust of the questions.

(3) Inadvertent non-completion of questionnaire. It is difficult to apportion the amount of the problem that

should go to anxiety, perceptual problems or unfamiliarity with the task.

(4) Understanding some items which were ambiguous.

It was decided that Problems one, two, and three could be eliminated to a large extent by using a personal interview technique with each subject, where the interviewer would have an opportunity to allay some of the anxiety, and to see that the questionnaire was completed. The ambiguous questions were eliminated from the questionnaire.

The Sample

According to the 1971 Census there were 29,505 citizens, 65 years of age and over living in metropolitan Edmonton. The variety of ways in which this group could be categorized is endless, e.g. degrees of physical health, economic status, age per se, etc. It was decided to categorize along a dependence-independence continuum ranging from those who were totally independent of outside sources for their daily living, to those in total care institutions where food, clothing, shelter and medical monitoring were all provided. The following five categories evolved.

Category 1. Totally independent: The people in this category are completely independent in that they maintain their own residence and care fully for their own daily needs. They are, in essence, as independent as any other group in adult society. This group was contacted by obtaining the permission and co-operation of a number of local senior citizen's clubs, to present the study to their members and

ask for volunteers to take part in the study. Other subjects in this group were obtained by referral from friends and people interested in the research. Many subjects after completing the questionnaire suggested the names of others whom they felt would be interested. The following local senior citizen's clubs representing a broad economic, educational, and ethnic spectrum were canvassed for volunteers:

(1) Lions' Senior Citizen's Club.

(2) Strathcona Place Senior Citizen's Club.

(3) Bissell Drop-In Centre.

(4) MacCauley Drop-In Centre.

(5) West End Senior Citizen's Drop-In Centre.

In the general population this independent group comprises the majority of senior citizens (85-90%) and of the sample group (91%).

Category 2. Mostly independent: This group is comprised of those people living in the facilities of the Greater Edmonton Foundation (Senior Citizen's Housing). Although they care for their own daily needs they are living in a somewhat sheltered situation in that their situation is being monitored by a small staff who would become available to assist in case of illness or other emergency. Although an individual or a couple may be living in an independent cottage or suite, if their health fails or the situation alters the resident staff would be aware daily of such a change and adjustments could be made such as medical care, provision of meals, admission to hospital, etc. This portion of the sample was contacted through several senior citizens' residences which

provide accommodation for physically and mentally competent seniors. In the general population this group comprises approximately 2,200 or 8% of the seniors. The sample group was (5%).

Category 3. Partially dependent: This group is made up of people living in their own homes but who receive some assistance from public agencies. Some agencies who provide this type of care are:

(1) V.O.N. which provides in-home nursing service to people with chronic conditions.

(2) Meals-on-Wheels - A daily hot meal service to people in their homes who for reasons of physical frailty, etc. are unable to provide a hot nutritious meal daily.

(3) Angus McGugan Day Care Hospital - A day care facility where an elderly person living in the community can spend the day and be given daily medical monitoring, physiotherapy and occupational therapy and return to their homes for the evening. Transportation is provided.

(4) Edmonton Home Care Program. People living in the community but who are unable to maintain the physical cleanliness and order of their household due to physical or mental infirmity can obtain the services of a housekeeper and shopper on a part-time basis. This category constitutes 1% of the population of seniors. The sample was (1%).

Cateogory 4. Moderately dependent. These people are residents of nursing homes where bed, board and light nursing care is provided. They must be capable of a degree of physical and mental independence to reside here, as the nursing care is more of a monitoring function and the provision of a sheltered environment. This group comprises 5% of the general population of seniors and (2%) of the sample.

Category 5. Dependent. This group is comprised of the residents of Auxiliary Hospitals whose mental or physical condition is such that they require medical or psychiatric supervision and 24 hour nursing care. This group comprises 3% of the general population and (1%) of the sample.

It was also decided to include a certain number of people in the 60-65 age group who, although not in the usual category of senior citizens by age, were approaching retirement. These were all in Category 1 of total independence.

In summation, a sample of 81 people aged 60+ roughly divided along a dependence-independence continuum were in the sample group. This sample approximated the percentage in each category in the community.

Limitations of the Sample

Some bias is introduced into the sample due to the fact that:

(1) All were volunteers. After the study was explained to them they were free to participate or to refuse. There was no data collected on the characteristics of the re-

fusers.

(2) All were English speakers. Many senior citizens in Edmonton came originally from a non-English speaking community and their command of English would be insufficient for the questionnaire.

(3) All were in fairly good physical and mental condition. Those aged who were senile or extremely frail physically, would be unable to take part in the study. On several occasions the questionnaire was being administered to a physically frail individual and it became obvious to the questioner that the subject's strength was being taxed and the interview was concluded at that point.

(4) All had some degree of education, either formal or informal, as the questions required a certain degree of elementary school vocabulary.

(5) All subjects were maintaining at least some social contacts. There are elderly people in the community who have completely withdrawn from social contacts and are extremely difficult to secure access to.

(6) All subjects exhibited a certain degree of openness. To be willing to discuss your life history, personality traits and hopes and fears with a stranger requires a certain degree of openness and trust. Some refusals

to take part in the study would fall in this area.

In summation, the sample is biased in that it is better educated, better socialized and in better physical and mental health than this age group in the community.

The Instruments

The Howarth Personality Questionnaire (HPQ). The HPQ was designed by Dr. Edgar Howarth, Department of Psychology, University of Alberta in 1973, using factor analytic methods. Its purpose is to elicit 10 putative personality factors. It consists of 120 statements which the subject feels apply or do not apply to him most of the time. A scale score ranging from 0 to 12 is obtained on each of the following factors.

1. Sociability (SY). This scale measures the quality of friendliness, desiring of social interaction, or enjoying the companionship of others.

2. Anxiety (AE). The presence of trait anxiety.

3. Dominance (AD). The desire to dominate in social interaction, or the drive to control others.

4. Conscience (SG). This scale rates a concern for moral goodness and the feeling of obligation to do right. It is similar to the concept of the "Superego."

5. Hypochondriac - Medical (HM). Ratings here indicate an excessive concern with one's health and the possibility of disease. This is often thought to be a manifestation of anxiety.

6. Impulsive (IP). This scale rates the tendency to act hastily without due consideration and control.

7. Co-operative - considerateness (CC). This scale rates a person's willingness to work with others in such a way that they are cognizant of the other's rights and feelings.

8. Inferiority (IF). The scale rates the degree to which a person feels unable to cope with situations that others are able to, and a wish not to "stand out" in any event.

9. Persistence (PS). This scale rates the tendency to continue a direction taken regardless of the intervening obstacles.

10. Suspicion vs Trust (TS). This scale rates the degree to which a person has doubts about the good motives or actions of another. A high score here indicates suspiciousness.

All scales are scored in a direction to accord with their title, e.g. the higher the score from 0-12 on the factor Persistence, the higher the tendency to continue despite obstacles.

The following scale reliabilities are presented by Howarth (1973):

Sociability	.84
Anxiety	.80
Dominance	.72
Conscience	.72
Medical	.66
Impulsive	.78
Cooperative	.43

Inferiority	.78
Persistence	.68
Suspicion	.74

The HPQ has been used for studies with over 3,467 subjects including male and female university anglophone students, francophone students, German students, army officers, army enlisted men, volunteer workers and a large sample of the aged. Representative scale means are presented and standard deviations are of the order of 2.5 for these scales.

The test's author, Dr. Howarth, states that a number of studies have been conducted or are in progress, to examine the validity of the HPQ. A standardization study for construct validity examining both item factor and item scale analysis has been conducted on the French and English versions. The external validity has been examined using armed forces personnel. Criterion relationships are being studied by the Department of Rehabilitation Medicine, University of Alberta. The HPQ is being used with the Eysenk Personality Inventory in a study of impaired drivers in Alberta, and with Cattell's 16 PF in a study of employability of persons, by the Edmonton Social Services. It has also been used in a provincial government sponsored study of the personality characteristics of volunteers. (Technical Background and User Information for Mainsteam and Adjunct Factor Inventories, 1973.)

Life Satisfaction Index Z. The Life Satisfaction Index Z (LSI-

Z) is a self-report instrument designed to elicit an individual's internal frame of reference with regard to his feelings of happiness, satisfaction or contentment, when he evaluates his past and present life. It was designed by Wood, Wylie and Sheafor in 1969 as a short satisfaction measure that could be administered by personal interview or mail and was derived from the more extensive Life Satisfaction Rating (LSR) developed for the Kansas City Study of Adult Life by Neugarten, Havighurst and Tobin (1961) which requires the judgment of a clinical psychologist following extensive interviewing.

The LSI-Z consists of 13 statements related to the subject's feelings about the degree of contentment with his present and past life. He may agree with, disagree with, or feel uncertain about each statement. Answers are scored on the basis of two points for a "correct" answer, one point for "uncertain" and zero points for a "wrong" answer. A total score is derived out of a possible 26 points with the higher score indicating the greater feeling of life satisfaction.

The original LSR developed for use in the Kansas City Study of Adult Life consisted of rating scales on five putative life satisfaction factors: zest; resolution and fortitude; congruence between desired and achieved goals; positive self-concept; and mood tone. Using a five point scale, a total rating ranging from five to 25 was obtained. The rating on each point was derived by an assessment of seven interviews over a six year period by a panel of clinical psychologists. Although the LSR seemed to be a good index of morale, it was felt that in most

circumstances the requirement of extended interviews and judgment by clinical psychologists would limit its usefulness. Subsequently the LSI-A and the LSI-B were developed by the same investigators (Neugarten, Havighurst & Tobin, 1961) using the LSR as a validation criterion. The LSI-A is a self-rating questionnaire consisting of 20 items and is suitable for use by untrained interviewers or in a mailed questionnaire. Later investigators (Wood, Wylie & Sheafor, 1969) did a further validation of the LSI-A with the LSR. In 150 paired judgments made by all three raters the following agreement resulted:

(a)	Zest	83%
(b)	Resolution	100%
(c)	Goal congruence	97%
(d)	Positive self-concept	97%
(e)	Mood tone	97%

The coefficient of correlation between LSI-A and LSR was .56. Wood, Wylie and Sheafor, (1969) then undertook an item analysis which resulted in the dropping of seven questions which were subject to instability. This shorter instrument called the LSI-Z was correlated with the original LSR with a range of .45 to .57. The validity coefficient of .57 is significant at the .01 level or beyond. The Kuder-Richardson Formula 20 "Coefficient Alpha" which computes on the average of all conceivable split halves was applied to the 100 LSI-Z scores. Test reliability was .79.

The Demographic and Social Environment Questionnaire. A

number of questions were included in the questionnaire that fall in the broad general areas of demographic and social environment. These questions elicited the following information on each subject:

(a) Age

(b) Sex

(c) Marital Status

(d) Retirement Status

(e) Reason for Retirement

(f) Pre-retirement occupation

(g) Income Level

(h) Independence of Residence

(i) Educational Level

(j) Religious denomination

(k) Number of children, grandchildren and great grandchildren

(l) Number of relatives in immediate vicinity

The Activities Questionnaire. Many investigators in the field of gerontology have suggested that there is a strong relationship between the activities, both social and solitary that an individual takes part in, and his degree of satisfaction with life (Havighurst, 1961; Havighurst & deVries, 1969; Kleemeier, 1961; Kreps, 1971; Murray, Powers, & Havighurst, 1971; Pfeiffer & Davis, 1971). A number of questions designed to give more information about the social and solitary activities of senior citizens were included in the questionnaire. In the area of

social activities, the answers would provide the following information:

(a) With whom did they occur?

(b) Frequency.

(c) Type.

(d) Was there a desire for more?

Solitary activities were also investigated as to the type that was of most interest to the subject.

The Opinion and Attitudes Questionnaire. It was felt that it was important to know some of the opinions and attitudes of the group on a variety of subjects and that this could be best determined by a number of open-ended questions where the person would not be forced into an "either-or" situation as in most structured questionnaires. The areas investigated here were:

1. What are the largest problems in retirement?
2. What is the greatest pleasure in retirement?
3. What age would you prefer to be?
4. If you won a lottery, what three things would you do?

Subjects were also asked to rate the following areas on variable point scales:

1. Their health.
2. The strength of their religious beliefs.
3. The happiness of their childhood.
4. The happiness of their marriage.

Method of Administration of the Questionnaire

After an individual had been contacted from the sources previously presented, the purpose and an account of how the questionnaire would be administered was described to the subject. If they agreed to participate, an appointment was made for the interview to take place in the individuals' homes or at the institution in which they resided.

At the meeting, the interviewer read all the questions to the subject and recorded the answers given. No explanations were given unless requested and then an attempt was made to keep the explanation brief and without any suggestion of a value judgment regarding the thrust of the question. The length of the interviews varied greatly (from 45 minutes to over four hours) and although no real data is available the impression is that often the more aged the subject, the longer the interview. This was not due to any slowness of answering by the oldest subjects but rather from a tendency to find each question a stimulus for anecdotes from their memories. It is interesting to speculate as to whether this is related to a decreasing circle of social contacts with whom they can communicate their ideas, or whether it has more relevance to the universal phenomena described by Butler (1968) as the Life Review. In the Life Review the elderly person has an opportunity to re-examine his past life and by reminiscence and reflection to resolve the conflicts that occurred and to clarify and find acceptance of the meaning of his life.

Data Processing

The answers to the questions were then transferred to data sheets and subsequently to punch cards for analysis by relevant statistical methods in the division of educational Research Services at the University of Alberta.

Chapter IV

Results

Introduction

As was stated in Chapter I the purpose of this study was to investigate the area of life satisfaction in an elderly population and to try to determine which psychological and sociological factors are related to a sense of meaningfulness, and enjoyment of life. To this end, the data gathered from the personal interviews was transferred to punch cards and statistical methods were used to test the research hypotheses which will be dealt with individually in this chapter.

The variables which were examined fall into four general categories:

1. Personality and Life Satisfaction. Howarth's Ten personality factors were examined for relationships between the factors and high scores on life satisfaction. The personality factor mean scores of the sample group were also compared with the personality factors mean scores obtained by Dr. Howarth with younger groups (under 65 years) for significant differences.

2. Demographic and Social Variables and Life Satisfaction. The demographic variables of sex, age, marital status, educational and income level, were tested for a correlation with life satisfaction. The area of retirement status, pre-retirement occupation and reason for retirement were similarly examined. The subject's health, strength of religious belief, social activities, number of children, relatives and

friends and their availability for interaction were also investigated for evidence of a relationship with satisfaction in life.

3. Attitudes to retirement, hopes, fears, etc. were elicited by a series of open ended questions. The answers were categorized and examined for patterns of concern of people in this age category.

4. Activities of Senior Citizens. The chosen activities of the sample group were tabulated in an effort to determine preferred activities and cross tabulations were calculated with the variables of sex, age, marital status, educational and income level and life satisfaction.

Research Hypotheses and Results

Hypothesis 1. There is no significant correlation between any of the ten personality variables and scores on the LSI.

A Pearson Product Moment Correlation was performed on the ten personality variables and the LSI scores. (See Table 1, Appendix A.) Of the ten personality variables six showed a significant relationship with Life Satisfaction Index scores. HM (Hypochondriac-medical), IF (Inferiority) and PS (Persistence) were significant at the .01 level whereas AE (Anxiety), IP (Impulsive), and SG (Conscience) were significant at the .05 level. Persistence and Conscience gave significant positive correlations and Anxiety, Impulsive, Hypochondriac-medical, and Inferiority gave significant negative correlations.

Hypothesis 2. There is no significant difference in personality factor mean scores between an aged group and a younger group (under

65 years).

A t-test for significant difference in means was performed on the mean scores of the ten personality factors for the sample group (the aged group) and a group of Dr. Howarth's 2,089 subjects composed of students, soldiers and officers (the younger group).

The personality factors mean scores of Conscience (SC), Impulsivity (IP), Co-operative Considerateness (CC), Inferiority (IF) and Persistence (PS) were significantly different at the $p < .001$ level.

A significant difference ($p < .01$) was found between the mean scores on the traits of Trust vs Suspicion (TS) with the younger group scoring more highly on suspicion.

No significant difference was found between the means of the personality factors Sociability (SY), Anxiety (AE), Dominance (AD), and Hypochondria-medical (HM).

The older group's mean scores were higher on Persistence, Co-operative considerateness and Conscience and lower on Inferiority and Impulsivity. (See Table 2, Appendix A.)

Hypothesis 3 - Sex. There is no significant difference in scores on the LSI between males and females.

An analysis of variance was performed on the two groups (male and female) to determine if the difference in scores on the two groups were significant. No significant difference in the scores on life satisfaction was found for the two groups (male and female). (See Table 3, Appendix A.)

Hypothesis 4 - Age. There is no significant difference in scores on the LSI in the different age categories.

After dividing the subjects into five age categories an analysis of variance was done to determine whether the different age categories varied significantly in their scores on the LSI. (See Table 4, Appendix A.) No significant difference was found using Analysis of Variance. A Chi Sq. test on the homogeneity of variance showed a significant difference at the $p < .01$ level. This difference appeared to be in Group 1 (ages 60-64) where the variance of scores on the Life Satisfaction index was very high indicating a non-homogenious group. (See Table 5, Appendix A.)

Hypothesis 5 - Marital Status. There is no significant difference in scores on the LSI between the groups of differing marital status.

An analysis of variance was performed on the four marital status groups (a) single, (b) married, (c) widowed, (d) separated or divorced. There was a significant difference between the means of the groups ($p < .01$). (See Table 6, Appendix A.) The probability matrix using Scheffe' Multiple Comparison of means test indicates a significant difference between groups 1 (single) and 4 (separated-divorced); groups 2 (married) and 3 (widowed); and groups 3 (widowed) and 4 (separated-divorced) with the greatest difference between groups 2 (married) and 4 (separated-divorced). (See Table 7, Appendix A.)

When the marital status categories were further collapsed into two categories of married or not married (containing single, widowed,

divorced or separated) there was a significant difference ($p < .001$) in the means of the scores on the LSI. (See Table 8, Appendix A.)

Hypothesis 6 - Retirement. There is no significant difference in scores on the LSI between different retirement categories.

The subjects were divided into groups on the basis of their retirement category and an analysis of variance was performed on the LSI scores. No significant differences were found. (See Table 9, Appendix A.)

A further check on the reason for retirement (Table 10, Appendix A) and pre-retirement occupation (Table 11, Appendix A) provided no further information.

Hypothesis 7 - Residence Independence. There is no significant difference between scores on the LSI for different categories of independence of residence.

The subjects were grouped on the basis of their dependence or independence of living arrangements and an analysis of variance was performed. No significant difference in their mean scores on the LSI were found. (See Table 12, Appendix A.)

Hypothesis 8 - Education. There is no significant difference in scores on the LSI for different categories of educational level.

The subjects were grouped on the basis of the level of education attained and an analysis of variance was performed. There was no significant difference in means of LSI scores. (See Table 13, Appendix A.)

Hypothesis 9 - Income Level. There is no significant difference in scores on the LSI for different categories of income level.

The subjects were divided into different income level categories and an analysis of variance revealed a significant difference ($p < .05$) in the scores on the LSI when the subjects are so grouped. (See Table 14, Appendix A.)

Hypothesis 10 - Health. There is no significant difference in scores on the LSI between different categories of self-perceived health status.

The subjects were divided into categories on the basis of their self evaluation of their health. Although life satisfaction scores increased with improved health the differences were not significant. (See Table 15, Appendix A.)

Hypothesis 11 - Religion

(a) There is no significant difference in scores on the LSI between categories of presence or absence of religious belief.

The subjects were divided into those who had religious beliefs and those who did not profess any. (See Table 16, Appendix A.) Although there appears to be a significant difference in the means of these two groups it must be noted that only four subjects occur in the "absence of religious belief" group and consequently one cannot put too much reliance in this finding.

(b) There is no significant difference in scores on the LSI between different categories of strength of religious belief.

The subjects were divided into four categories on their expressed strength of religious influence on their daily lives. (See Table 17, Appendix A.) Once again, although this factor appears to be significant ($p < .01$) the smallness of group 1 (no belief) would demand caution in interpreting this result too strongly. A probability matrix for a Scheffe' Multiple Comparison of Means shows the significant difference in means to be between groups 1 (no belief) and 4 (strong belief).

Hypothesis 12 - Self-perceived Happiness

(a) There is no significant difference on scores on the LSI between various categories of childhood happiness.

The subjects were asked to rate their perceptions of the degree of happiness they experienced during childhood. They were subsequently divided into these categories and an analysis of variance was performed on the LSI scores occurring in the different groups. (See Table 18, Appendix A.)

This significant inverse relationship between scores of the LSI and degree of perceived childhood happiness is an unexpected finding as it appears that the more unhappily they rated their childhood the higher their present scores on the LSI ($p < .01$).

(b) There is no significant difference on scores on the LSI between various categories of marital happiness.

The subjects were asked to rate their perception of the degree of happiness they experienced in their marriage. After dividing into these categories an analysis of variance reveals a significant relation-

ship between the perceived degree of marital happiness and the mean scores on the LSI ($p < .01$). (See Table 19, Appendix A.)

Hypothesis 13 - Number of children and relatives

(a) There is no significant difference on scores on the LSI between different categories of number of children.

The subjects were divided into three categories of number of children and an analysis of variance reveals no significant difference between the means of the LSI. (See Table 20, Appendix A.)

(b) There is no significant difference on scores on the LSI between people grouped in categories of presence or absence of grandchildren and great grandchildren. (See Tables 21 and 22, Appendix A.)

No significant differences between scores on the LSI grouped according to whether the subjects have grandchildren and great grandchildren were found.

(c) There is no significant difference on scores on the LSI in differing categories of the number of relatives who live near.

The subjects were divided up into categories of numbers of relatives who live within visiting distance and an analysis of variance revealed no significant difference in these various categories. (See Table 23, Appendix A.)

Hypothesis 14 - Social Activities

(a) There is no significant difference on the scores on the LSI between the differing categories of friends or relatives with whom one interacts.

The subjects were divided into categories depending on whether their social interactions were primarily with friends or relatives. An analysis of variance revealed no significant differences in these categories using the LSI scores. (See Table 24, Appendix A.)

(b) There is no significant difference on the scores on the LSI between the different frequencies of social interaction.

The subjects were grouped in categories according to the frequency of their social interaction. An analysis of variance revealed no significant differences on the scores of the subjects on the LSI grouped according to these categories. (See Table 25, Appendix A.)

Hypothesis 15 - Age Preference

(a) There is no significant difference on scores on the LSI between the different categories of age preference.

The subjects were asked to state what age they would like to be and were divided into groups on this basis. An analysis of variance on the LSI scores grouped according to this stated age preference revealed a significant difference between scores on the LSI when grouped according to stated age preference, however a Scheffe multiple comparison of means failed to show a simple difference between the individual groups. (See Table 26, Appendix A.)

(b) There is no significant difference on scores on the LSI between the different categories of discrepancy between stated age preference and actual age.

The subjects were grouped according to the size of the dis-

crepancy between their stated age preference and their actual age. An analysis of variance on the LSI scores grouped according to these categories revealed no significant difference. (See Table 27, Appendix A.)

Additional Findings

A number of open-ended questions were asked in order to elicit the hopes, fears and interests of this group of Seniors. Their answers were categorized and cross-tabulations were made.

Question 1. If you won a Million Dollar Lottery tomorrow what three things would you do?

The answers received were categorized into the following six responses as first, second and third choices.

(a) I would make no change in my life. See Appendix A, Table 28.

The majority of people in all age groups did not mention this choice (84 - 94%) and the only group that mentioned this as a first choice was in the 65 - 69 age group which is already facing or experiencing a great change in lifestyle, i.e. retirement.

(b) I would purchase material possessions. See Appendix A, Table 29.

As one ascends the age groupings the choice of material things is given increasingly less often, until in the 80+ age group no subject mentioned the purchase of material things as a suitable purpose for the use of a large sum of money. The younger the age category the more subjects chose material possessions as their first choice (46.2%).

(c) I would spend it on my family. See Appendix A, Table 30.

The general trend here, is that the older a person is, the less tendency there is to plan to spend money on one's family. 61.5% of the youngest group mentioned family giving whereas only 44.4% of the 80+ group would spend the money in this way.

(d) I would use it for philanthropic purposes. See Appendix A, Table 31.

It appears that, in general, the older one becomes, the more likely one would be to spend a windfall income on philanthropy. No one in the youngest age group made this a 1st or 2nd choice whereas 77.8% of the 80+'s mentioned philanthropy as the way they would use the money.

(e) I would use it for travel. See Appendix A, Table 32.

The general trend is for the older age groups to become decreasingly interested in travel. The 65-69 year group does not seem to fit the general pattern as they are less interested in travel than their age placement would suggest.

(f) I would not want to receive it. See Appendix A, Table 33.

The older the age group the more they expressed dismay and dislike over the idea of having won a lottery. The range was from only 7.7% of people in the 60 - 64 age group to 33.3% of those in the 80+ age group who would reject the idea of lottery winnings.

When one looks at the total choices throughout all age groups of the sample (See Table 34, Appendix A) the primary purpose for which lottery winnings would be spent would be for the subject's Family. Travel, Material things and Philanthropy would come second, with those who don't want the lottery or would make no change in their lifestyle a low third.

Question 2. What do you feel are your greatest problems in retirement?

The answers received were categorized under seven divisions of first, second and third choices.

(a) I am concerned about my financial situation. See Appendix A, Table 35.

It would appear that most of the subjects did not perceive financial problems as troublesome although they came from all income levels. 15.8% of those in the 75 - 79 age group mentioned finances as a worry and this represents the largest group voicing this concern.

(b) I have difficulty in scheduling activities I enjoy in the large amount of free time available daily.
See Appendix A, Table 36.

This does not appear to be a large problem. The 65 - 69 age group who have just entered retirement report this as a problem somewhat more frequently than other groups (28.4%).

(c) I believe emotional difficulties excluding loneliness constitute a retirement problem. See Appendix A, Table 37.

The 65 - 69 age group or those just having entered retirement see this as a larger problem than other age categories. 33.3% list it as a problem of first magnitude.

(d) I believe loneliness constitutes a retirement problem. See Appendix A, Table 38.

Approximately 15% of all age groups saw loneliness as a problem.

(e) I believe the necessity of facing death is a problem in the retirement years. See Appendix A, Table 39.

It is not surprising to find the age group 80+ expressing the second highest percentage of concern with facing death (11.1%) but it is unexpected to find over twice that many expressing concern in the youngest group 60 - 64 years (23.1%) with the intermediate groups having very small concern in this area.

(f) I believe that experiencing physical decline is a problem of the retirement years. See Appendix A, Table 40.

No clear pattern emerges here except that this is a major concern for those in the 80+ group and is mentioned by 66.6% of this group.

(g) I do not have any problems in retirement. See Appendix A, Table 41.

This response was given more frequently by those over 70 years than those under 70. The group who most seldom said that there were no problems were those who were approaching or who had just entered re-

tirement.

Table 42 in Appendix A summarizes their identification of retirement problems. The primary concern of the group studied was the prospect of physical decline but conversely their second highest choice was the absence of retirement problems. Loneliness, emotional difficulties, time scheduling and facing death were seen as problems in that order of importance. Financial problems were seen as a very weak 7th place problem.

Question 3. What do you feel are the greatest pleasures of the retirement stage of life?

The answers received were categorized under six responses as first, second and third choices.

(a) I now have financial security. See Appendix A, Table 43.

A small percentage of subjects in each age category (5% - 11%) stated that they felt more secure financially since retirement.

(b) Not having to go regularly to work and perform the required duties at work constitutes one of the greatest pleasures in retirement. See Appendix A, Table 44.

This response was given by more than one half of the subjects in the 65 - 79 year age group with somewhat fewer in the 80+ and 64 - 69 groups (35%).

(c) I now have time and freedom to pursue activities of specific interest to me. See Appendix A, Table 45.

This was a fairly strong choice throughout all age groups with more than half of all subjects in all age groups mentioning it. In the 70 - 80 year group over 70% of all subjects saw the freedom and time to pursue their interests as an important retirement pleasure.

(d) I find one of the greatest pleasures in retirement is the enjoyment of social relationships with both friends and family. See Appendix A, Table 46.

This response was given most strongly by those in the 80+ age group (55.6%) but was only mentioned by 7.7% of those in the 60 - 64 age group with the other age groups falling between these two figures.

(e) I find no pleasure in retirement. See Appendix A, Table 47.

This response occurred most frequently in the group just retired (23.1%) and less frequently in the older age groups with no one in the 80+ group giving this response.

(f) I find the greatest pleasure in retirement in religious activities. See Appendix A, Table 48.

This response was given infrequently with the greatest incidence of responses in the 75 - 79 age group (10.5%).

Table 49 in Appendix A summarizes the Number of Responses given in each category of perceived retirement pleasures. The responses given most frequently were those of "Release from work responsibilities" and "Time Freedom for individual interests" with "Enjoyment of Social Relationships" ranking third." "Financial Security", "Religious

Activities" and "No Retirement Pleasure" were much less frequently given responses.

Activities

All of the theories of aging stress the importance of activities performed by the aging person although the emphasis on the need for these activities varies according to the theory under discussion. The activity theory of aging (Havighurst, 1963) states that the more activities engaged in, the higher the degree of success in aging whereas the disengagement theory (Cumming & Henry, 1961) postulates that there is a gradual decrease in activities both social and solitary over time as the geront slowly withdraws his emotional and physical investment in other people and activities. In order to provide information about the activities engaged in, the sample was asked to respond to a number of suggested activities, both social and solitary with either a "yes" or "no" indicating whether they currently engaged in this activity or not. No attempt was made to determine the amount of time spent in the various activities but only whether they were currently performed. Cross tabulations were calculated with the various activities and the variables of:

1. Sex
2. Age
3. Marital Status
4. Educational level
5. Income level
6. Life satisfaction

The Social Activities involved were:

1. Visiting Friends
4. Sports

2. Visiting Relatives
3. Games (Bridge, Cribbage, Scrabble, etc.)
5. Community Activities
6. Cultural Activities
7. Religious Activities

The Solitary Activities involved were:

1. Reading
2. T.V. viewing
3. Handicrafts
4. Painting
5. Gardening
6. Sport viewing
7. Collecting
8. Travel
9. Music
10. Movies

1. Sex (See Appendix A, Table 50)

On the basis of being male or female there appeared to be very little difference in the activities engaged in except for the expected finding that more women paint and more men like to view sports. Somewhat more women report visiting relatives as an activity than men do.

2. Age (See Appendix A, Table 51)

It appears that in the group studied there was no general drop off in activities with increasing age except for a few specific areas such as sports, games, and travel. There is an increase in such activities as community, cultural and religious activities and visiting relatives. Over 50% of the people in the youngest age group wished to have more activities than they currently engaged in. This desire decreased over the age groups with no one in the 80+ group wishing for more activities.

3. Marital Status (See Appendix A, Table 52)

Married and widowed people engage in the most activities with single people close behind in number of activities. Divorced or separated people are involved in relatively few activities. Some of these findings would be expected, e.g. single people (28.6%), separated and divorced people (33.3%) visit relatives less often than married people (85.4%) and widowed people (96.3%). Separated and divorced people also are involved in T.V. viewing, handicrafts, gardening, sports viewing, movies and religious activities less often. It is interesting that although widowed and divorced people in the study have both lost a partner, the activity profile of the widowed is very similar to that of the married person. The divorced person appears to engage in different and fewer activities. No divorced person wished to have more activities than they currently had and 66% of the widowed did. A small number of single people (14.6%) and married people (29.6%) wished for more activity.

4. Educational Level (See Appendix A, Table 53)

When cross tabulated with the variable Educational Level no particular patterns emerge except the expected finding that the higher the educational level the more they tend to be interested in cultural activities.

5. Income Level (See Appendix A, Table 54)

The same pattern is evident as in the preceding variable (education) where the higher the income the more interest in cultural activities and surprisingly, sports viewing.

6. Life Satisfaction (See Appendix A, Table 55)

The general trend throughout most of the activities is that as the degree of satisfaction with life is lower so is the activity level. There is no great difference in the most common activities that most people engage in, e.g. visiting, reading and T.V. viewing but those who report the highest satisfaction are engaged in more cultural and religious activities, more handicrafts, gardening, music and movie-going. Surprisingly collecting is one activity where the trend is reversed.

Table 56 (Appendix A) presents a summary of the average number of people who report an interest in any particular activity. Visiting friends, reading and T.V. viewing are activities reported by over 90% of the subjects in the sample. 21.84% of the sample wish for more activities than they have.

Chapter V

Summary, Discussion and Implications

Summary

The purpose of this study was to investigate life satisfaction or enjoyment of life in an elderly population. As an increasing number of people live on into old age it is necessary to know which psychological and sociological factors are associated with contentment and satisfaction in the older person.

Face-to-face interviews were conducted with 81 persons over 60 years of age. These people were chosen with regard to independence of living situations so that the sample would be roughly similar to the population of persons over 60 in Edmonton. As in the community, the largest part of the sample was drawn from seniors living totally independently, with smaller proportions from more sheltered situations such as Senior Citizen's Residences, Nursing Homes and Auxiliary Hospitals.

The interviews consisted of a Personality Factor Questionnaire, a Life Satisfaction Questionnaire, a number of open-ended questions on attitudes toward retirement, future hopes, etc. and an investigation of the kind and quantity of activities in which the seniors were currently involved.

The data from these interviews was transferred to punch cards and the relevant statistical tests were conducted using the Educational Research Services at the University of Alberta.

The information derived from the interviews and tests as reported in Chapter IV fall into four general categories:

1. Personality and Life Satisfaction
2. Demographic and Social Variables and Life Satisfaction
3. Attitudes toward retirement, hopes, fears, etc.
4. Activities of interest to Senior Citizens

The foregoing will be discussed under these headings in the succeeding pages.

1. Personality Factors

(a) Relationship of Personality Factors and Life Satisfaction

Of the ten personality factors, six showed significantly high correlations with life satisfaction. It would be expected that a negative correlation would exist between Inferiority (IF) and Life Satisfaction. A strong feeling of inferiority with its negative effect on the self-concept would most likely prevent full enjoyment and contentment. This finding agrees with the studies by Kutner, Fanshel, Togo and Langner (1956) and Morrison and Kristjanson (1958) who found that older people who saw themselves as disadvantaged or inferior relative to their peer group had lower morale than those who did not.

Several studies have emphasized the positive relationship between health and life satisfaction (Kutner et al., 1956; Maddox & Eisdorfer, 1962; Strieb, 1956; Suchman, Phillips & Strieb, 1958) and the fact that it is the subject's own perception of his health rather than his physician's assessment that is related to his good morale. The personality factor

hypochondria-medical and its companion anxiety reflects the individual's negative perceptions about the state of his health and is likely to be found in conjunction with low life satisfaction.

The tendency to act impulsively (IP), which is also negatively correlated with life satisfaction, is a trait which is found less often in the aged than in the young (Bendig, 1960; Slater & Scarr, 1964; Wagner, 1960). The reason for the shift from impulsivity to a greater degree of caution is not fully understood but may be related to the slowing of responses that occurs with age. In those people who continue to act impulsivity there may be a succession of poorly considered decisions and rash actions that contribute more to unhappiness than enjoyment of life. In order to achieve what Erikson (1950) refers to as a sense of ego integrity one must feel that the events of one's life have been meaningful and inevitable. Strong impulsivity would be more likely to prevent this achievement and leave one with regrets and a lack of fulfillment.

The positive relationship between the trait of conscience and life satisfaction is difficult to explain. Gurin, Veroff and Feld (1960) emphasize the salience of "moral goodness" to older people as they point out that people over 55 years are more likely than younger people to describe their good characteristics in moral terms such as 'honest', 'trustworthy', 'loyal', etc. Younger people tend to list qualities such as "being independent", "being well adjusted", etc. However a concern for moral goodness and a feeling of obligation to do right, merely set a standard which one strives for, and does not preclude the pos-

sibility of failure to meet this standard. Although one may feel good when one successfully meets the demands of conscience, it is equally reasonable to assume the presence of guilt and unhappiness when unable to meet one's own criteria.

The positive relationship found between persistence and life satisfaction may be due to a variety of reasons ranging from the possibility that a sense of task completion provides satisfaction, to the possibility that continued striving brings final success. Neugarten (1964) and Atchley (1971) suggest in the Continuity Theory of Aging that the ability to continue habits, associations and preferences built up over time (in spite of environment and physiological change) produces a successful ager. A considerable degree of persistance would be required to maintain this equilibrium despite continual shocks to one's life space.

It was surprising not to find a significant relationship between life satisfaction and such traits as sociability, co-operative-considerateness and trust since it was anticipated from the literature that these would show a relationship. Current folklore and the activity theories of aging would suggest that successful aging with contentment and enjoyment of life in the later years is highly related to involvement with others and the quality of that involvement. On the other hand, these qualities may only be important where they represent a continuance of the lifestyle of the individual. There is evidence that those who have lived an isolated and socially inactive life in their earlier years, will

be content to continue this pattern whereas those who have been socially active and fully engaged in activity with others will feel greatly deprived unless able to continue in this life style.

(b) A Comparison of Two Age Groups

A comparison was made between the personality factor mean scores obtained by the elderly sample group (age 60+) with Dr. Howarth's representative sample composed of students (anglophone and francophone), army officers and soldiers (all under age 55). It was found that although the factors of sociability, anxiety, dominance and hypochondria were not significantly different for the two groups, the factors of suspicion, conscience, impulsivity, co-operativeness, inferiority and persistence showed a significant difference. The older group appeared to be much better adjusted with less suspicion, inferiority and impulsivity and higher scores on the more desirable traits of conscience, co-operativeness and persistence. These results are consistent with a further study by Howarth (1976) in which he investigated the personality characteristics of volunteers from a somewhat older age group (up to 60 years) than his normative group. When the data was analysed for four age ranges, sociability levels remained stable over age levels but conscience increased with age and levels of suspicion were lower in the 51 - 60 year range than in the youngest group (21 - 30 years). It may be rather simplistic to say that the older group (60+) had superior personality characteristics compared to the Howarth normative group without taking into account the social acceptability factor. The younger

group was guaranteed anonymity by the method of questionnaire presentation (Howarth, 1978) whereas the senior group members were involved in personal interviews and may have wished to give answers which they felt were socially acceptable.

2. Demographic and Sociopsychological Variables and Life Satisfaction

The sample was divided into various demographic and sociopsychological categories. An analysis of variance was performed on the Life Satisfaction scores to determine if there was any significant difference between the various categories. Men and women did not differ significantly in their Life Satisfaction Index scores, nor did the age categories show a significant difference. This is an unexpected finding since studies by Gurin, et al. (1960) suggest that although few older people state they are actually unhappy, the number who are very happy declines with age. Men are also seen as more contented than women in a study by Kutner et al. (1956). The conflicting results may be due to the present study being composed primarily of a favored group in terms of socialization, health and income level.

The retirement category, the reason for retirement and the pre-retirement occupation also did not reveal a significant difference in the scores obtained on the Life Satisfaction Index. When the subjects were divided into two groups on the basis of the independence or dependence of their living arrangements, again there was no significant difference. This latter finding may be due to the difficulty in obtaining a represen-

tative sample of those who are living dependently. Although some members of the sample came from an auxiliary hospital, they were to a large extent, the healthiest and most mentally capable of that dependent category.

The categories of self-perceived health status did not distinguish between the groups at a statistically significant level. However the trend for better health category to be associated with higher life satisfaction can be seen in the increasing Life Satisfaction Index means with the increase in perceived health. As mentioned previously, most studies find a positive relationship between health and life satisfaction (Kutner et al., 1956; Maddox & Eisdorfer, 1962; Strieb, 1956; Suchman, Phillips & Strieb, 1958). The importance of the health factor may be seen both by the studies that show that as health worsens so does one's enjoyment of life (Schmidt, 1951; Thompson, Strieb & Kosa, 1960) and also by the fact that for many elderly people, the good condition of their physical bodies is a source of joy and a subject of grateful conversation (Gurin, et al., 1960)

Similarly, although educational level categories did not show differences at a statistically significant level the trend appears to be for increasing mean scores on the Life Satisfaction Index with increasing levels of education. This lack of significance may be due in part to the nature of the sample whose members are better educated than the general population of senior citizens. The lowest group has at least elementary schooling and over 50% have technical or some university

training.

Rather surprising neither the number of relatives, children and grandchildren who live within visiting distance nor the frequency of social activities (whether with friends or relatives) showed a significant relationship with life satisfaction scores. One would expect (according to the activity theory of aging) that the more frequently one had social interaction and the more people available to provide it, the higher would be one's enjoyment of life. The findings of this study would lend more support to the theory that maintenance of past circumstances is more vital than the number of relationships available. Those people in the study who had few relatives, friends, and social activities and yet had high scores on life satisfaction may have been continuing a previously acceptable lifestyle. Unfortunately the question of whether current circumstances represented change or continuance was not investigated

The following six demographic categories showed significant differences in their life satisfaction scores:

(i) Marital Status

There was a significant difference between the categories of single, widowed, separated/divorced and married in life satisfaction scores. Those in the married category had the highest mean scores on the Life Satisfaction Index followed by the single, widowed and separated/divorced categories in that order. These findings are not unexpected, in that our culture has said, until very recently, that fulfillment in life

is most likely found in the married state. Gurin, et al. (1960) also points out that with increasing age there is a decline in the number of people who report problems in relationships with their partner. It is not known whether the problems have been resolved or have just been accepted, but the result is that the relationship is seen as a worthwhile investment. It is likely that people who are still single at 60+ years prefer this situation or have made their adjustment to it. Widowed people in this age group are most likely to have suffered a fairly recent bereavement and this probably would color their outlook on life for a considerable time. Those who are separated or divorced have the lowest mean scores and this result is compatible with having failed in one of life's developmental tasks.

(ii) Income Level

A significant difference was found between the different income categories in life satisfaction. Although the means on the Life Satisfaction Index increase with each rising income level, the significant difference occurs between Category 1 (less than $2,000 annually) and Category 4 (more than $15,000 annually). This finding is not surprising in that the attempt to live on less than $2,000 annually must create many problems in management to obtain even the necessities and certainly a loss of most of those pleasures and satisfaction that can be purchased. Other studies lend support to this result, as most find a relationship between income level and life satisfaction (Strieb, 1956; Thompson, et al. (1960). Very few subjects when answering the open-

ended questions on their worries and concerns in the post-retirement years voiced a desire for more money or even a feeling of deprivation of material things. Indeed, most subjects including those in the lowest income groups expressed a feeling of greater than expected financial security. Most women and many men in the lower income levels said that the old age pension was the first steady income they had ever received, and although low, it was sufficient and more importantly, guaranteed. This is consistent with the research which shows a general decline in concern for material things with age (Back & Gergen, 1966; Gurin et al., 1960).

(iii) Religious Belief

Those people who acknowledged the presence of religious belief had higher life satisfaction than those who did not hold any religious belief. Of those who admitted holding religious beliefs, there was an increase in life satisfaction with the increasing strength of belief.

It must also be noted that only four subjects out of 81 expressed a desire to be listed as having no religious belief and this somewhat negates the strength of this finding, but not perhaps the general trend. That only four people out of 81 denied religious belief is probably due less to the explanation that all people turn to religion as they grow older, than to the possibility that past generations were more religiously oriented throughout their entire lifespan, than present younger generations.

There is some confusion in the literature as to whether

the expression of a person's religiosity should be judged by church attendance or their own expressed religious values and private observances. It appears that although church attendance falls off for a variety of reasons in advanced old age (infirmity, poverty, lack of transportation, etc.) (Barron, 1961; Havighurst, 1960; Orbach, 1961) personal religious habits such as prayer and Bible reading continue and may even increase (Erskine, 1963). Moberg and Taves (1965) found that older people are more likely to believe in a God and an afterlife than young people, but it is not known whether this is due to age or to the different life experiences of different cohorts. There is considerable evidence that people who are church members (particularly church leaders), read the Bible and listen to religious broadcasts are better adjusted than people who do not (Riley & Foner, 1968). However, it is not known whether religious beliefs and observances enhance adjustment or whether well-adjusted people are more likely to participate in religion.

(iv) Childhood Happiness

The subjects were asked to rate their perception of the degree of happiness they experienced during their childhood. A significant difference was found between the life satisfaction means of Group 1 (very happy) and Group 3 and 4 (moderately happy, and unhappy). Surprisingly those who rate their childhood as the most happy have the lowest scores on the Life Satisfaction Index and as their degree of childhood happiness decreases their scores on the Life Satisfaction Index increase. This is a somewhat unexpected finding and one can

only speculate as to the reasons for it. Could it be explained by a tendency to idealize the past? If an older person is quite unhappy at the present time, from any number of causes, such as bereavement, financial insecurity, loneliness or infirmity, he might look back on his childhood as much more enjoyable, with the reality softened by the intervening time. It may also be explained by the fact that a person who has suffered a deprived or unhappy childhood may have lower expectations about what life should be, than one who experienced only joy and love as a child. If in the later years they have been able to be reasonably happy by comparison, the years of maturity will be seen as more highly rewarding.

(v) Marital Happiness

When the subjects rated their perception of the happiness of their marriage a significant difference was found between the Life Satisfaction Index scores of Category 1 (extremely happy) and Category 4 (unhappy). Although one study found little relationship between life satisfaction and marriage (Kerckhoff, 1966) it seems more reasonable to assume that a successful marital relationship, with its lengthy and pervasive influence on an individual's life, would greatly affect his morale. Married people tend to have higher scores on the Life Satisfaction Index than unmarried people and one would expect that happily married people would tend to be found at the higher end of this group.

(vi) Age Preference

When the subjects were asked what age they would prefer

to be, there was a significant difference in Life Satisfaction Index scores of those choosing to be under 50 years of age from those choosing over 50 years. Those choosing to be over 50 years (roughly the age group they were in, chronologically) had the highest scores on life satisfaction. This is rather an expected finding in that one would expect to find greatest satisfaction in life when one's wishes were close to reality. It is interesting that only two people would have liked to be under twenty. A large number of women would have liked to be in the 20 - 40 age group "when my children were little" as they saw these as very good years that were not recognized as such, during that time. More than half the sample preferred to be roughly in the age group 50+. These findings may be related to the results of two studies that showed that old people who classified themselves as "old" had fewer psychiatric symptoms and saw the future more realistically than those who denied their age (Kastenbaum & Durkie, 1964, Perlin & Butler, 1963).

3. Hopes, Fears, Problems and Attitudes to Retirement

A number of open-ended questions were asked in order to present the subjects with a chance to express freely their hopes, plans, fears, etc.

(i) If you won a Million Dollar Lottery tomorrow what three things would you do?

Over all the age groups the most popular choice for using this windfall would be to spend it on one's family. Travel, material possessions and philanthropic uses ranked together as the next possible

uses for unexpected wealth. As you ascend the age categories people are less likely to spend it on material possessions and travel and more likely to spend it on philanthropic purposes. Rather surprisingly the oldest older people are less likely to spend it on their families although this finding does lend support to the disengagement theory of aging (Cummings & Henry, 1961) who describe a gradual lessening of emotional investment in family and friends as a normal component of later old age. The older the age group, the more likely they were to say that they would prefer not to win the money as they either did not want it per se, or that it would be too frightening a responsibility to use it properly. This reflects the finding mentioned previously that as one ages, money and material possessions lose their saliency (Back & Gergen, 1966; Gurin et al., 1960).

(ii) What do you feel are your greatest problems in retirement?

The answers to this question point up the diversity of this age group and the fact that all people 60+ cannot be lumped together as having the same problems and concerns. The 60 - 70 age group or those who are about to retire or have recently retired appear to be a different group from those 70+. The 60 - 70 year old's are concerned about filling their days with meaningful activities when they are no longer in the work force. They worry about emotional problems such as age discrimination, loss of role and lowered self-concept, loneliness and facing death. In many ways this group resembles a group of teen-

agers, facing with anxiety, the developmental tasks of adulthood. These young-old people face the developmental tasks of old age and must meet the challenge of a "redefinition of physical and social space, substitution of alternative sources of need satisfaction reassessment of the criteria for evaluation of self", etc. (Clark & Anderson, 1967). While this "emotional upheaval" is going on within the individual, the larger society does not lessen his anxiety by its devaluation of the role of the elderly and its unhappy sterotypes of aging (de Beauvoir, 1972; Bennett & Eckman, 1973; Butler, 1974; Tournier, 1971; Vischer, 1967). Those subjects over 70 were more likely to say that they had no problems in retirement although a small proportion in the 80+ group was rather realistically worried about physical decline and facing death. The general serenity of the oldest-old group may be due to several causes. By 70 years most of the adjustments to being old (as opposed to middle-aged) have been made, and one has had time to solve the stresses of retirement and to accomplish the developmental tasks. It should also be noted that there is a relationship between good psychological adjustment and survival (Aldrich, 1964). The very old group may be a well-adjusted group from which the more stressed individuals have been deleted by death. Financial problems were not mentioned by any age group as a major problem or concern. Overall one gains the impression that those 60 - 70 are rather unsure, worried and upset by their new status whereas those 70+ are largely enjoying their lives with a few realistic concerns about physical decline and death.

(iii) What do you feel are the greatest pleasures of the retirement stage of life?

Most people across all age groups see the time freedom to pursue activities of interest to them as the greatest pleasure in the retirement years. Those young enough to remember vividly their recent work responsibilities (age group 65 - 79) feel that no longer having to go to work regularly and perform the required duties at work is one of the most enjoyable experiences of retirement. Older old people (80+ years) saw relationships with friends and family as one of the advantages of retirement. This seems to be more a change of interest, from activity to relationship, with a greater appreciation of the pleasures of human companionship, as the possibility of relationship must have been present, previous to retirement. An infrequent response was finding no pleasure in retirement but when this response occurred it was most frequently found in those who had just retired and was not given by anyone in the 80+ age group. This would seem to confirm the suggestion mentioned above that the period immediately before and after retirement is a time of conflict and adjustment with the later years more tranquil and enjoyable.

4. Activities

Because of the great importance given to activities in the literature on theories of aging (Cumming & Henry, 1961; Havighurst, 1963) an effort was made to determine what activities the senior citizens in the sample actually engaged in. What seemed surprising was the large

number of interests both social and solitary that most of these people had. Of course it must be remembered that the sample is biased, in that the majority are better educated, better adjusted and socialized than many seniors in the community. This is consistent with other studies which show that degree of health (Maddox & Eisdorfer, 1962; Scotch & Richardson, 1966), and socioeconomic status are positively correlated with high levels of activity (Kutner et al., 1956; Lowenthal, 1964; Maddox & Eisdorfer, 1962; Scotch & Richardson, 1966).

Visiting friends and relatives and reading and T.V. viewing seem to be almost universal activities. Games such as bridge and scrabble, community activities such as canvassing for heart fund, and volunteer activities interest more than half of the sample (An active 92 year old is president of resident's association in one lodge). Handicrafts of all kinds, and gardening either yard, greenhouse or houseplant variety are a diversion for a majority. Cultural activities are a strong interest of many and the usual form this takes is in attending concerts, art purchases and educational classes in various subjects. Some forms are rather unusual as one 82 year old lady teaches highland dancing in a senior citizen's club. There does not appear to be any strong drop-off in activities with age but rather a general substitution of more sedentary ones. Cultural activities increase over age whereas sports and travel tend to be less frequently reported in the oldest age groups, and would appear to be due to a reduction in physical strength and available energy. This successful substitution of a more

suitable activity for one that can no longer be happily performed is referred to by Peck (1968), Havighurst (1963), Lemon, Bengtson and Peterson (1972) and Williams and Worths(1965) as one of the hallmarks of the successful ager. Many studies have found that people tend to continue the degree of activity that has been characteristic of their earlier life (Lowenthal, 1964; Maddox, 1968; Videbeck & Knox, 1965).

One rather surprising finding is the difference in number of activities when cross-tabulations are made with marital status. Married and widowed people engage in the greatest number of activities with single people following closely. However separated or divorced people are engaged in very few activities in comparison. It might be expected that they would visit relatives less often but fewer of them report that they watch T. V., do handicrafts, gardening, sports-viewing, go to movies or religious activities. As mentioned in Chapter 4 although widowed and divorced people have both lost a partner, the activity profile of the widowed is very similar to that of the married person. The divorced person appears to engage in different and considerably fewer activities. Significantly although 66% of the widowed people would like to have more activities none of the divorced people wished for more than they currently had. These findings are consistent with the research which shows that single and divorced people are more introverted than married and widowed people (Willoughby, 1938) and indeed are more likely to be institutionalized (Bellin & Hardt, 1958; Lowenthal & Berkman, 1967).

It is not surprising to find that the higher the level of education and income the higher the interest in cultural activities.

When the activities are cross-tabulated with three levels of life satisfaction the general trend is for those who engage in the most activities to report the highest satisfaction with their life. There is no great difference in the most common activities engaged in by most people such as reading, visiting relatives and friends and T. V. viewing but those who report the highest satisfaction are engaged in more cultural and religious activities, more handicrafts, gardening and movie going. Rather surprisingly the trend is reversed for the activity of collecting where more people who report low satisfaction, collect as a hobby. The general finding that the higher the number of activities engaged in, the higher the degree of life satisfaction, while in agreement with the activity theory of successful aging must be viewed with caution because of the nature of the sample group. It was not possible to include isolated and somewhat withdrawn (or disengaged) people who may still have high degrees of enjoyment, in the group.

Implications

Although the sample was small and somewhat select as previously outlined, several possibilities for future study and some interesting implications have arisen:

1. Early Identification of a Problem Population

If people are going to be assisted medically and financially to live on into older old age do we not have a responsibility to see that

that portion of their life is as enjoyable and fulfilling as possible? It might be possible to identify those people at 40, 50 and 60 years who having those personality characteristics which correlate with low life satisfaction may be headed for an unsatisfying and empty old age. While personality traits are not the only factors contributing to successful or unsuccessful aging, Neugarten (1964) sees them as the central pivot from which all other factors are affected. As a part of pre-retirement counselling those persons who had, for example, high scores on anxiety, hypochondria, feelings of inferiority, and impulsivity and low scores on persistence and conscience might be expected to have low life satisfaction in the later years. This group, once identified, could be offered help in modifying the negative aspects and increasing the positive factors which are highly associated with life satisfaction.

2. Counselling the Elderly

Very little counselling is available to the elderly for a variety of reasons. Many psychologists and counsellors do not like to work with the elderly (Palmore, 1972) both because of their devalued place in society ("My time is taken up with people who are in the work force") and also because of a general belief that aging is all decrement and therefore positive change is impossible in later ages (Freud, 1949/1969; Rogers, 1951). However this stereotyped view is not in agreement with psychological and gerontological theory which sees the personality as a dynamic system which does not suddenly stop accommodating to life changes at 30, 40 or 50 but continues to adapt to changes in inter-

nal and external stimuli until death (Neugarten, 1963, 1964; Atchley, 1972). This premise, once accepted, opens up a whole new area for the helping professions particularly when more becomes known about what are the possible roles, satisfactions and joys of later life.

3. Division of Old Age

Everyone would agree that in developmental study one would not lump data from the 10 year olds with data from 30 year olds as the developmental changes that occur between ages 10 and 20 and ages 20 and 30 are so many and diverse that one is actually investigating a very different situation. Probably due to the scarcity of knowledge in this area in the past most studies attempt to look at the interval from 60 - 80+ as a unit. However in the sample studied these two groups of people (60 - 70 and 70+) appear to be very different in terms of hopes, concerns, and satisfactions. The group from 60 - 70 appear to be somewhat more worried, unsure and unhappy in what might be termed the adolescence of old age. Those who survive beyond 70 years seem to be more accepting and content. In future studies perhaps even five year intervals should receive full concentration as being quite dissimilar in nature.

4. Securing a Good Sample

One of the greatest difficulties in gerontological research is securing a random sample. There is no captive population such as school children, soldiers or mental hospital patients where one can be sure that a good sample has been obtained. Older people generally

must be persuaded to volunteer to engage in research and many older people do not want to, as they seem to have a fear of invasion of privacy or of revealing the loss of abilities (Bischof, 1969). Contacting involved and active older people is relatively easy but this ignores the many elderly who haye lost social contacts and seldom leave their homes. The advantages of longitudinal studies were mentioned earlier, however as this is a very expensive undertaking the provision of funds will remain a problem. A longitudinal study set up with a random sample of 40 year olds, and investigations carried on at five year intervals for the next 40 years would be a good contribution to our understanding.

Changes in the Population Pyramid

The trend for the number of elderly in the population to increase both numerically and proportionately, is continuing at an increasing rate because of the drop in the birth rate and improved medical care and living conditions for all ages.

The many implications for the type of society that will result are to a large extent outside the scope of this report but a few will be mentioned to suggest the type of problems and advantages that will obtain. As the number of people past working age increases the burden of the cost of pensions and services will be magnified for the working group. There may be changes in the tax structure and already the idea of mandatory retirement age is being questioned, and has been changed in some areas. It is not known what percentage of the elderly will

elect to remain at work past 65 years. While being able to continue working will be of benefit to those who wish to do so, it may also have drastic effects on unemployment of youth if many old people choose this option. If this ever increasing group of people decide to retire as usual, the burden on pension plans and free medical services will be overwhelming on the relatively small contributing work force.

As the numbers of elderly increase so will their purchasing power as many are well-off financially. However the types of goods and services they require and desire will be different from those that are currently profitable, e.g. (children's goods, sporting goods, etc.). This will be a whole new group of consumers of goods, services and culture which has been in the past largely ignored.

Politically the old have seldom voted as a block. One exception is the Townsend Old Age Revolving Pension plan which swept the older voters in the U.S.A. in 1934 (Puner, 1974). It is only in extreme old age that voter participation begins to drop off (Campbell, Converse, Miller & Stokes, 1960; Current Population Reports, 1966) and the political arena is one area where people over 60 years may continue to wield power. There is also a tendency for older people to continue to support the party of their choice (Campbell et al., 1960; Eldersveld, 1952) and as such "gray power" may become a force for political parties to consider in the formation of their platforms.

As each succeeding cohort of old people reaches retirement and beyond there will be a noticeable increase in their level of education,

as the average educational level is rising with the generations. Their income is likely to be improved by mandatory pension plans and retirement insurance with fewer people having only the old age pension to support them. The health of older people is also improving with medical advances. The older person today and in the future, for the foregoing reasons, will have a greater ability to continue to contribute to society's welfare, as well as his own. As The Gray Panthers in their Statement of Principles emphasize:

> Older persons in this society constitute a great national resource, which has largely gone unrecognized, undervalued and unused. The experience, wisdom and competence of older persons are greatly needed in every sector. Creative and innovative ways must be found to enable older people to make their contribution to a new age of liberation. Many older people have freedom - freedom to think, reflect, and act. Jobs and families can no longer be jeopardized by radical actions. Older people have demonstrated their ability to cope and survive. Nevertheless, many have been discarded in this technological age, and alienated from themselves and society at large. This alienation, if joined with positive self-awareness, can become a liberating social force . p. 463 (Kuhn, 1976)

Many elderly people want and are capable of doing meaningful

work - not necessarily full time or for remuneration. The appropriate roles for this time of life have never been defined in our culture. What are the criteria for a good grandparent? Perhaps we need "job descriptions" for the elderly so that we would at least know what the possibilities of challenge are. Does an elderly person have responsibilities and roles to play that are of value to the community at large? There are large numbers of outgoing, healthy, experienced people who generally would like to keep on contributing to the society in which they live. Their self-concept suffers and there is a tendency to withdraw into self-concern when all of society says "you are too old to contribute now."

In summation, a profile of the senior citizen, in this study, who has high life satisfaction emerges. It is a happily married man or woman, with the personality characteristics of persistence and high conscience without excessive self-concern and with strong religious beliefs. They have a fairly good income, accept their age and engage in many interests and hobbies.

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APPENDIX A

TABLES

Table 1

Correlations between 10 Personality Variables and Life Satisfaction Index Scores

	Variables	Correlation	p-value	
1	Sociability (SY)	0.17	.12	
2	Anxiety (AE)	-0.25	.02	*
3	Dominance (AD)	0.15	.17	
4	Conscience (SG)	0.22	.05	*
5	Hypochondriac-Medical (HM)	-0.28	.01	**
6	Impulsive (IP)	-0.26	.02	*
7	Co-operative-considerateness (CC)	-0.04	.73	
8	Inferiority (IF)	-0.50	.00	**
9	Persistence (PS)	0.30	.01	**
10	Suspicion vs Trust (TS)	-0.15	.18	

* $p < .05$

** $p < .01$

Table 2

Personality Factor Means: A comparison of the elderly group with the Representative Scale Means

Personality Factor	(N-81) Elderly Means	(N-2089) Representative Means	t	p
1 Sociability (SY)	7.29	7.47	.6324	n. s.
2 Anxiety (AE)	4.11	3.83	-.987	n. s.
3 Dominance (AD)	4.85	4.64	-.204	n. s.
4 Conscience (SG)	9.54	5.60	-14.03	.001
5 Medical (HM)	4.06	3.53	1.83	n. s.
6 Impulsive (IP)	3.19	4.20	3.55	.001
7 Co-operative (CC)	9.42	8.28	-4.02	.001
8 Inferiority (IF)	2.51	3.83	4.68	.001
9 Persistence (PS)	8.97	7.68	4.59	.001
10 Suspicion (TS)	4.92	5.70	2.75	.01

Table 3

The Means, Standard Deviations, and Analysis of Variance of Life Satisfaction Index Scores for Elderly Grouped as Male and Female

N	Sex	Mean	SD	F	p
25	M	20.80	5.35	1.41	.29
56	F	20.28	4.51		

Table 4

The Means, Standard Deviations, and Analysis of Variance of Life Satisfaction Index Scores for Elderly Grouped in Age Categories

N	Age	Mean	SD	F	p
13	60-64	17.38	7.53		
21	65-69	20.52	4.13		
19	70-74	21.26	3.54		
19	75-79	21.58	4.08		
9	80 +	20.55	3.57		
				1.83	0.13

Table 5

Summary of Chi-Square Test for Homogeneity of the Variance of Life Satisfaction Index Scores for Elderly Grouped in Age Categories

N	Age	Mean	Variance	SDEV
13	60-64	17.38	56.76	7.53
21	65-69	20.52	17.06	4.13
19	70-74	21.26	12.54	3.54
19	75-79	21.58	16.70	4.08
9	80 +	20.55	12.78	3.57
81				
$\chi^2 = 11.82$		$p = 0.01$		

Table 6

The Means, Standard Deviations, and Analysis of Variance of Life Satisfaction Index Scores for Elderly Grouped in Marital Status Categories

N	Marital Status	Mean	SD	F	p
7	single	20.86	4.98		
41	married	22.36	3.49		
27	widowed	19.07	3.71		
6	sep./divorced	13.00	7.48		
				10.79	.000

Table 7

Probability Matrix for Scheffé Multiple Comparison of Means for Table 6

(Elderly Grouped in Marital Status Categories)

Marital Status		Single 1	Married 2	Widowed 3	Sep/Divorced 4
Single	1	1.000	0.8439	0.7849	0.0104
Married	2	0.8439	1.0000	0.0182 *	0.0000 *
Widowed	3	0.7849	0.0182 *	1.0000	0.0162 *
Sep/Divorced	4	0.0104 *	0.0000 *	0.0162 *	1.0000

Table 8

The Means, Standard Deviations, and Analysis of Variance of Life Satisfaction Index Scores of Elderly Grouped in Two Marital Status Categories

N	Marital Status	Mean	SD	F	p
40	Not married	18.48	5.10	16.11	.000
41	Married	22.35	3.49		

Table 9

The Means, Standard Deviations, and Analysis of Variance of Life Satisfaction Index Scores of Elderly Grouped in Three Retirement Categories

N	Retirement Category	Mean	SD	F	p
52	Retired	20.79	4.71	1.33	.269
10	Semi Retired or Working	21.50	4.30		
19	Never in the Labor Force	18.95	5.02		

Table 10

The Means, Standard Deviations, and Analysis of Variance of Life Satisfaction Index Scores of Elderly Grouped in Four Reasons for Retirement Categories

N	Reason for Retirement	Mean	SD	F	p
38	Mandatory Age	20.68	5.01	.41	.75
10	Health	22.30	2.66		
9	Own choice	21.11	4.62		
8	Other	21.75	2.25		

Table 11

The Means, Standard Deviations, and Analysis of Variance of Life Satisfaction Index Scores of Elderly Grouped in Six Pre-retirement Occupation Categories

N	Pre-retirement Occupation	Mean	SD	F	p
19	Housewife	18.95	5.02	.95	.456
24	Professional	21.80	3.27		
9	Managerial	21.55	3.75		
10	Labor	19.50	5.58		
10	Service	20.10	5.02		
9	Clerical	20.33	6.92		

Table 12

The Means, Standard Deviations, and Analysis of Variance of Life Satisfaction Index Scores of Elderly Grouped as Dependent or Independent Residence

N	Residence	Mean	SD	F	p
74	Independent	20.72	4.46	2.86	.095
7	Dependent	17.57	6.99		

Table 13

The Means, Standard Deviations, and Analysis of Variance of Life Satisfaction Index Scores of Elderly Grouped by Educational Level

N	Educational Level	Mean	SD	F	p
15	Jr. High (or less)	18.60	6.06	1.10	0.356
19	Jr. High - Senior Matric	20.63	5.54		
35	Technical or some University	20.68	4.03		
12	University Degree	21.75	3.19		

Table 14

The Means, Standard Deviations, and Analysis of Variance of Life Satisfaction Index Scores of Elderly Grouped by Income Level

N	Income Level	Mean	SD	F	p
18	Less than 2,000 annually	18.17	6.56	3.14	.03
36	2-7,000 annually	20.19	4.06		
18	7-15,000 annually	21.89	3.91		
9	15,000 + annually	23.11	2.42		

Table 15

The Means, Standard Deviations, and Analysis of Variance of Life Satisfaction Index Scores of Elderly Grouped According to Self-Perceived Health Status

N	Health	Mean	SD	F	p
24	Poor	18.87	5.51	2.22	0.115
44	Good	20.84	4.62		
13	Excellent	22.00	2.82		

Table 16

The Means, Standard Deviations, and Analysis of Variance of Life Satisfaction Index Scores of Elderly Grouped According to Presence or Absence of Religious Belief

N	Religious Belief	Mean	SD	t	p
77	Present	20.75	4.38	2.66	.004
4	Absent	14.50	8.23		

Table 17

The Means, Standard Deviations, and Analysis of Variance of Life Satisfaction Index Scores of Elderly Grouped According to Strength of Religious Beliefs

N	Strength Religious Belief	Mean	SD	F	P
4	None	14.50	8.23	5.28	.002
11	Slight	18.00	4.52		
26	Moderate	20.00	4.97		
40	Strong	22.00	3.49		

Table 18

The Means, Standard Deviations, and Analysis of Variance of Life Satisfaction Index Scores of Elderly Grouped According to Perceived Childhood Happiness

N	Degree of Childhood Happiness	Mean	SD	F	P
24	Very happy	17.42	5.49	6.80	.0004
27	Usually happy	20.59	4.74		
18	Moderately happy	22.56	2.40		
12	Unhappy	23.00	2.22		

Table 19

The Means, Standard Deviations, and Analysis of Variance of Life Satisfaction Index Scores of Elderly Grouped According to Perceived Marital Happiness

N	Degree of Marital Happiness	Mean	SD	F	p
31	Extremely happy	22.19	3.71	3.85	.007
27	Usually happy	19.78	4.02		
9	Moderately unhappy	20.22	3.03		
7	Unhappy	15.14	8.65		

Table 20

The Means, Standard Deviations, and Analysis of Variance of Life Satisfaction Index Scores of Elderly Grouped According to Number of Children

N	No. of Children	Mean	SD	F	p
13	Less than three	19.85	4.89	0.19	.823
51	3 - 6	20.46	4.59		
10	over 6	21.10	5.88		

Table 21

The Means, Standard Deviations, and Analysis of Variance of Life Satisfaction Index Scores of Elderly Grouped According to Presence or Absence of Grandchildren

N	Grandchildren	Mean	SD	t	p
16	No	20.13	4.50	-.29	.38
65	Yes	20.52	4.85		

Table 22

The Means, Standard Deviations, and Analysis of Variance of Life Satisfaction Index Scores of Elderly Grouped According to Presence or Absence of Great Grandchildren

N	Great Grandchildren	Mean	SD	t	p
57	No	20.68	4.85	.69	.24
24	Yes	19.87	4.56		

Table 23

The Means, Standard Deviations, and Analysis of Variance of Life Satisfaction Index Scores of Elderly Grouped According to Number of Near Relatives

N	No. of Relatives (near)	Mean	SD	F	p
10	0	19.00	6.41	.71	.55
21	Less than 5	20.00	4.82		
11	5 - 10	19.36	4.05		
39	10 +	21.05	4.47		

Table 24

The Means, Standard Deviations, and Analysis of Variance of Life Satisfaction Index Scores of Elderly Grouped According to Friend or Relative Interaction

N	Interaction	Mean	SD	F	p
7	Mostly family	21.28	3.77	.19	.83
45	Mostly friends	20.53	5.15		
29	Equally friends and family	20.10	4.41		

Table 25

The Means, Standard Deviations, and Analysis of Variance of Life Satisfaction Index Scores of Elderly Grouped According to Frequency of Social Interaction

N	Frequency	Mean	SD	F	p
10	Once weekly or less	19.60	6.02	.71	.492
51	2-5 times weekly	20.19	5.06		
20	+5 times weekly	21.50	3.01		

Table 26

The Means, Standard Deviations, and Analysis of Variance of Life Satisfaction Index Scores of Elderly Grouped According to Stated Age Preference

N	Age Preference	Mean	SD	F	p
13	10 - 30	18.15	6.77	3.06	.03
20	31 - 50	18.90	4.42		
26	51 - 70	21.76	4.47		
22	71 - 90	21.64	3.05		

Table 27

The Means, Standard Deviations, and Analysis of Variance of Life Satisfaction Index Scores of Elderly Grouped According to Degree of Age Discrepancy

N	Age Discrepancy	Mean	SD	F	p
40	0 - 10 years	21.48	4.04	2.49	.089
31	20 - 40 years	19.00	5.57		
10	50 - 60 years	20.80	3.85		

Table 28

The Percentage in Each Age Group (who after winning a lottery) Made it Their First, Second or Third Choice to Maintain Their Life Style Unchanged or Did Not Mention This Choice

Age Group	1st Choice	2nd Choice	3rd Choice	Not Mentioned
60 - 64	0.0	7.7	7.7	84.6
65 - 69	9.5	4.8	0.0	85.7
70 - 74	0.0	5.3	0.0	94.7
75 - 79	0.0	5.3	5.3	89.5
80 +	0.0	11.1	0.0	88.9

Table 29

The Percentage in Each Age Group (who after winning a lottery) Made Material Possessions Their First, Second, or Third Choice or Did Not Mention This Choice

Age Group	1st Choice	2nd Choice	3rd Choice	Not Mentioned
60 - 64	46.2	15.4	15.4	23.1
65 - 69	23.8	33.3	4.8	38.1
70 - 74	15.8	26.3	10.5	47.4
75 - 79	21.1	10.5	5.3	63.2
80 +	0.0	0.0	0.0	100.0

Table 30

The Percentage in Each Age Group (who after winning a lottery) Made it Their First, Second, or Third Choice to Spend it on Their Family or Did Not Mention This Choice

Age Group	1st Choice	2nd Choice	3rd Choice	Not Mentioned
60 - 64	38.5	15.4	7.7	38.5
65 - 69	33.3	23.8	4.8	38.1
70 - 74	36.8	21.1	5.3	36.8
75 - 79	26.3	21.1	5.3	47.4
80 +	22.2	11.1	11.1	55.6

Table 31

The Percentage in Each Age Group (who after winning a lottery) Made it Their First, Second, or Third Choice to Use it for Philanthropic Purposes

Age Group	1st Choice	2nd Choice	3rd Choice	Not Mentioned
60 - 64	0.0	0.0	23.1	76.9
65 - 69	19.0	14.3	9.5	57.1
70 - 74	36.8	15.8	10.5	36.8
75 - 79	5.3	26.3	15.8	52.6
80 +	33.3	33.3	11.1	22.2

Table 32

The Percentage in Each Age Group (who after winning a lottery) Made it Their First, Second, or Third Choice to Spend it on Travel, or Did Not Mention This Choice

Age Group	1st Choice	2nd Choice	3rd Choice	Not Mentioned
60 - 64	7.7	61.5	7.7	23.1
65 - 69	9.5	14.3	14.3	61.9
70 - 74	10.5	31.6	15.8	42.1
75 - 79	10.5	26.3	10.5	52.6
80 +	11.1	11.1	0.0	77.8

Table 33

The Percentage in Each Age Group Who Mentioned as Their First, Second, or Third Choice That They Would Not Want to Receive Lottery Winnings

Age Group	1st Choice	2nd Choice	3rd Choice	Not Mentioned
60 - 64	7.7	0.0	0.0	92.3
65 - 69	4.8	0.0	0.0	95.2
70 - 74	0.0	0.0	5.3	94.7
75 - 79	36.8	0.0	0.0	63.2
80 +	33.3	0.0	11.1	55.6

Table 34

The Percentage of the Total Sample Who After Winning a Lottery Would Choose Each Category in Each Age Group

Age Group	No Change	Materials	Family	Philan-thropic	Travel	Don't Want
60 - 64	2.5	12.3	9.9	3.7	12.3	1.2
65 - 69	3.8	16.0	16.0	11.1	9.9	1.3
70 - 74	1.2	12.4	14.7	14.9	13.6	1.2
75 - 79	2.5	8.6	12.3	11.1	11.2	8.6
80 +	1.2	0.0	4.9	8.6	2.4	5.0
Totals	11.2	49.4	57.8	49.4	49.4	17.3

Table 35

The Percentage in Each Age Group Who Perceived Financial Problems as First, Second, or Third Choice of Retirement Problems or Did Not Mention This Choice

Age Group	1st Choice	2nd Choice	3rd Choice	Not Mentioned
60 - 64	0.0	0.0	0.0	100.0
65 - 69	0.0	0.0	0.0	100.0
70 - 74	5.3	0.0	0.0	94.7
75 - 79	15.8	0.0	0.0	84.2
80 +	0.0	0.0	0.0	100.0

Table 36

The Percentage in Each Age Group Who Preceived Time Scheduling as First, Second, or Third Choice of Retirement Problems or Did Not Mention This Choice

Age Group	1st Choice	2nd Choice	3rd Choice	Not Mentioned
60 - 64	7.7	7.7	0.0	84.6
65 - 69	19.0	9.5	0.0	71.4
70 - 74	0.0	5.3	0.0	94.7
75 - 79	15.8	0.0	0.0	84.2
80 +	0.0	0.0	0.0	100.0

Table 37

The Percentage in Each Age Group Who Perceived Emotional Difficulties as First, Second, or Third Choice of Retirement Problems or Did Not Mention This Choice

Age Group	1st Choice	2nd Choice	3rd Choice	Not Mentioned
60 - 64	0.0	7.7	0.0	92.3
65 - 69	23.8	9.5	0.0	66.7
70 - 74	5.3	5.3	0.0	89.5
75 - 79	0.0	5.3	5.3	89.7
80 +	11.1	0.0	0.0	88.9

Table 38

The Percentage in Each Age Group Who Perceived Loneliness as First, Second, or Third Choice of Retirement Problems or Did Not Mention This Choice

Age Group	1st Choice	2nd Choice	3rd Choice	Not Mentioned
60 - 64	15.4	0.0	0.0	84.6
65 - 69	14.3	4.8	0.0	81.0
70 - 74	15.8	0.0	0.0	84.2
75 - 79	15.8	5.3	0.0	78.9
80 +	0.0	11.1	0.0	88.9

Table 39

The Percentage in Each Age Group who Perceived Facing Death as First, Second, or Third Choice of Retirement Problems or Did Not Mention This Choice

Age Group	1st Choice	2nd Choice	3rd Choice	Not Mentioned
60 - 64	7.7	15.4	0.0	76.9
65 - 69	0.0	4.8	0.0	95.2
70 - 74	0.0	5.3	0.0	94.7
75 - 79	0.0	5.3	0.0	94.7
80 +	11.1	0.0	0.0	88.9

Table 40

The Percentage in Each Age Group Who Perceived Physical Decline as First, Second, or Third Choice of Retirement Problems or Did Not Mention This Choice

Age Group	1st Choice	2nd Choice	3rd Choice	Not Mentioned
60 - 64	30.8	0.0	0.0	69.2
65 - 69	23.8	0.0	0.0	76.2
70 - 74	42.1	0.0	0.0	57.9
75 - 79	21.5	15.8	0.0	63.2
80 +	55.6	11.1	0.0	33.3

Table 41

The Percentage in Each Age Group Who Perceived no Problems in Retirement as Their First, Second, or Third Choice or Did Mention This Choice

Age Group	1st Choice	2nd Choice	3rd Choice	Not Mentioned
60 - 64	7.7	0.0	0.0	92.3
65 - 69	19.0	0.0	0.0	81.0
70 - 74	31.6	5.3	0.0	63.2
75 - 79	31.6	0.0	0.0	68.4
80 +	22.2	0.0	0.0	77.8

Table 42

The Percentage of the Total Sample, in Each Age Group Who Chose Each Category of Retirement Problems

Age Group	Financial	Time Scheduling	Emotional Difficulties	Loneliness	Physical Decline	Facing Death	No Problems
60 - 64	0.0	15.4	7.7	15.4	30.8	23.1	7.7
65 - 69	0.0	28.5	33.0	19.1	23.8	4.8	19.0
70 - 74	5.3	5.3	10.6	15.8	42.1	5.3	36.8
75 - 79	15.8	15.8	10.6	21.1	36.8	5.3	31.6
80 +	0.0	0.0	11.1	11.1	66.7	11.1	22.2

Table 43

The Percentage in Each Age Group Who Perceived Financial Security in Retirement as Their First, Second, or Third Choice or Did Not Mention This Choice

Age Group	1st Choice	2nd Choice	3rd Choice	Not Mentioned
60 - 64	7.7	7.7	7.7	76.9
65 - 69	9.5	0.0	0.0	90.5
70 - 74	5.3	10.5	5.3	78.9
75 - 79	5.3	5.3	5.3	84.2
80 +	0.0	11.1	0.0	88.9

Table 44

The Percentage in Each Age Group Who Perceived the Release from Employment Responsibilities as a Retirement Pleasure of First, Second, or Third Choice or Did Not Mention This Choice

Age Group	1st Choice	2nd Choice	3rd Choice	Not Mentioned
60 - 64	15.4	7.7	7.7	69.2
65 - 69	38.1	14.3	0.0	47.6
70 - 74	31.6	26.3	5.3	36.8
75 - 79	15.8	52.6	0.0	31.6
80 +	22.2	11.1	0.0	66.7

Table 45

The Percentage in Each Age Group Who Perceived Freedom of Time for Interests as a Retirement Pleasure of First, Second, or Third Choice or Did Not Mention This Choice

Age Group	1st Choice	2nd Choice	3rd Choice	Not Mentioned
60 - 64	15.4	15.4	0.0	69.2
65 - 69	14.3	42.9	0.0	42.9
70 - 74	31.6	42.1	0.0	26.3
75 - 79	57.9	15.8	0.0	26.3
80 +	33.3	22.2	0.0	44.4

Table 46

The Percentage in Each Age Group Who Perceived Social Relationships as a Retirement Pleasure of First, Second, or Third Choice or Did Not Mention This Choice

Age Group	1st Choice	2nd Choice	3rd Choice	Not Mentioned
60 - 64	7.7	0.0	0.0	92.3
65 - 69	23.8	0.0	4.8	71.4
70 - 74	26.3	0.0	0.0	73.7
75 - 79	10.5	0.0	0.0	89.5
80 +	44.4	11.1	0.0	44.4

Table 47

The Percentage in Each Age Group Who Said They Found no Pleasure in Retirement as a First, Second, or Third Choice or Who Did Not Mention This Choice

Age Group	1st Choice	2nd Choice	3rd Choice	Not Mentioned
60 - 64	23.1	0.0	0.0	76.9
65 - 69	14.3	0.0	0.0	85.7
70 - 74	5.3	0.0	0.0	94.7
75 - 79	10.5	0.0	0.0	89.5
80 +	0.0	0.0	0.0	100.0

Table 48

The Percentage in Each Age Group Who Perceived Religious Activities as First, Second, or Third Choice of Retirement Pleasures or Who Did Not Mention This Choice

Age Group	1st Choice	2nd Choice	3rd Choice	Not Mentioned
60 - 64	0.0	7.7	0.0	92.3
65 - 69	0.0	0.0	0.0	100.0
70 - 74	0.0	0.0	0.0	100.0
75 - 79	0.0	10.5	0.0	89.5
80 +	0.0	0.0	0.0	100.0

Table 49

The Percentage of the Total Sample in Each Age Group Who Chose Each Category of Retirement Pleasures

Age Group	Release from Work	Time Freedom	Social Relation-Ships	Financial Security	Religious Activities	No Pleasure
60 - 64	30.8	30.8	7.7	23.1	7.7	23.1
65 - 69	52.4	57.1	28.6	9.5	0.0	14.3
70 - 74	63.2	73.7	26.3	21.1	0.0	5.3
75 - 79	68.4	73.7	10.5	15.8	10.5	10.5
80 +	33.3	55.6	55.6	11.1	0.0	0.0

Table 50

The Percentage of Males and Females Who Report Involvement With Specified Activities, Social and Solitary

N.		Male 25	Female 56
1.	Visit Friends	96.0	96.4
2.	Visit Relatives	68.0	85.7
3.	Games	56.0	69.6
4.	Sports	48.0	39.3
5.	Community Activities	60.0	67.9
6.	Cultural Activities	72.0	62.5
7.	Religious Activities	52.0	60.7
8.	Reading	80.0	98.2
9.	T.V. Viewing	92.0	92.9
10.	Handicrafts	72.0	73.0
11.	Painting	12.0	25.0
12.	Gardening	68.0	64.3
13.	Sports Viewing	56.0	28.6
14.	Collecting	20.0	33.9
15.	Travel	72.0	73.2
16.	Music	72.0	67.9
17.	Movies	24.0	33.9
18.	Desire More	24.0	21.4

Table 51

The Percentage of People in Various Age Categories Who Report Involvement with Specified Activities Both Social and Solitary

	AGE CATEGORY				
	60-64	65-69	70-74	75-79	80+
N.	13	21	19	19	9
1. Visit Friends	92.3	100.0	100.0	89.5	100.0
2. Visit Relatives	69.2	66.7	89.5	89.5	88.9
3. Games	84.6	66.7	57.9	57.9	66.7
4. Sports	61.5	42.9	31.6	42.1	33.3
5. Community Activities	69.2	57.1	63.2	63.2	88.9
6. Cultural Activities	61.5	52.4	68.4	68.4	88.9
7. Religious Activities	46.2	28.6	73.7	68.4	77.8
8. Reading	84.6	95.2	84.2	100.0	100.0
9. T.V. Viewing	84.6	100.0	100.0	89.5	77.8
10. Handicrafts	69.2	81.0	73.7	63.2	77.8
11. Painting	7.7	23.8	21.1	26.3	22.2
12. Gardening	69.2	66.7	52.6	73.7	66.7
13. Sports viewing	38.5	28.6	31.6	47.4	44.4
14. Collecting	30.8	42.9	31.6	26.3	0.0
15. Travel	69.2	71.4	84.2	73.7	55.6
16. Music	76.9	57.1	73.7	68.4	77.8
17. Movies	38.5	47.6	21.1	21.1	22.2
18. Desire more	53.8	23.8	21.1	10.5	0.0

Table 52

The Percentage of People in Various Categories of Marital Status Who Report Involvement with Specified Activities, Both Social and Solitary

	Marital Status			
	Single	Married	Widowed	Sep/Div
N.	7	41	27	6
1. Visit Friends	100.0	97.6	96.3	83.3
2. Visit Relatives	28.6	85.4	96.3	33.3
3. Games	57.1	63.4	70.4	66.7
4. Sports	14.3	48.8	40.7	33.3
5. Community Activities	71.4	68.3	63.0	50.0
6. Cultural Activities	57.1	75.6	55.6	50.0
7. Religious Activities	100.0	53.7	63.0	16.7
8. Reading	85.7	92.7	96.3	83.3
9. T.V. Viewing	85.7	100.0	92.6	50.0
10. Handicrafts	28.6	85.4	74.1	33.3
11. Painting	28.6	24.4	18.5	0.0
12. Gardening	28.6	75.6	63.0	50.0
13. Sports Viewing	14.3	51.2	29.6	0.0
14. Collecting	57.1	26.8	25.9	33.3
15. Travel	85.7	82.9	59.3	50.0
16. Music	57.1	78.0	59.3	66.7
17. Movies	42.9	31.7	29.6	16.7
18. Desire More	14.6	29.6	66.7	0.0

Table 53

The Percentage of People in Various Categories of Educational Level Who Report Involvement With Specified Activities, Both Social and Solitary

	Educational Level						
	Grade 9	Some High School	Senior Matriculation	Some University	Technical School	Undergraduate Degree	Graduate Degree
N.	15	13	6	18	17	8	4
1. Visit friends	93.3	100.0	83.3	100.0	100.0	100.0	75.0
2. Visit relatives	86.7	76.9	66.7	94.4	70.6	62.5	100.0
3. Games	80.0	84.6	83.3	33.3	76.5	50.0	50.0
4. Sports	46.7	53.8	16.7	33.3	41.2	37.5	75.0
5. Community activities	80.0	76.9	33.3	72.2	47.1	62.5	75.0
6. Cultural activities	46.7	46.2	66.7	72.2	64.7	100.0	100.0
7. Religious activities	53.3	69.2	66.7	66.7	52.9	50.0	25.0
8. Reading	80.0	92.3	83.3	100.0	94.1	100.0	100.0

Table 53 (continued)

	Educational Level						
	Grade 9	Some High School	Senior Matriculation	Some University	Technical School	Undergraduate Degree	Graduate Degree
N.	15	13	6	18	17	8	4
9. T.V. viewing	93.3	92.3	83.3	94.3	94.1	87.5	100.0
10. Handicrafts	66.7	69.2	66.7	88.9	64.7	75.0	75.0
11. Painting	6.7	23.1	0.0	33.3	11.8	37.5	50.0
12. Gardening	53.3	76.9	66.7	61.1	64.7	62.5	100.0
13. Sports viewing	26.7	30.8	50.0	55.6	23.5	50.0	25.0
14. Collecting	24.8	46.2	33.3	16.7	47.1	12.5	0.0
15. Travel	46.7	84.6	66.7	77.8	70.6	100.0	75.0
16. Music	60.0	76.9	66.7	83.3	58.8	62.5	75.0
17. Movies	26.7	23.1	0.0	27.8	47.1	37.5	50.0
18. Desire More	33.3	7.7	33.3	16.7	29.4	12.5	25.0

Table 54

The Percentage of People in Various Categories of Income Level Who Report Involvement With Specified Activities, Both Social and Solitary

	Annual Income Level				
	Less 2,500	2,500 - 7,000	7,000 - 15,000	15,000 - 25,000	Over 25,000
N.	13	21	19	19	9
1. Visit friends	88.9	97.2	100.0	100.0	100.0
2. Visit relatives	66.7	88.9	83.3	66.7	66.7
3. Games	77.8	50.0	83.3	50.0	100.0
4. Sports	38.9	38.9	44.4	50.0	66.7
5. Community activities	83.3	55.6	77.8	33.3	66.7
6. Cultural activities	38.9	66.7	72.2	100.0	100.0
7. Religious Activities	38.9	69.4	61.1	33.3	66.7
8. Reading	77.8	97.2	100.0	83.0	100.0
9. T.V. viewing	88.9	91.7	100.0	83.3	100.0
10. Handicrafts	61.1	80.6	66.7	83.3	66.7

Table 54 (continued)

	Annual Income Level				
	Less 2,500	2,500-7,000	7,000 - 15,000	15,000 - 25,000	Over 25,000
N.	13	21	19	19	9
11. Painting	22.2	13.9	33.3	33.3	0.0
12. Gardening	44.4	58.3	88.9	100.0	66.7
13. Sports viewing	22.2	33.3	55.6	33.3	66.7
14. Collecting	27.8	33.3	27.8	16.7	33.3
15. Travel	50.0	77.8	88.3	66.7	100.0
16. Music	66.7	66.7	72.2	66.7	100.0
17. Movies	11.1	30.6	44.4	16.7	100.0
18. Desire More	27.8	19.4	11.1	50.0	33.3

Table 55

The Percentage of People in Various Categories of Self-Evaluated Life Satisfaction Who Report Involvement With Specified Activities Both Social and Solitary

		Life Satisfaction		
		Great	Considerable	Little
N.		26	33	22
1.	Visit friends	92.3	100.0	95.2
2.	Visit relatives	80.8	84.8	71.3
3.	Games	61.5	69.7	61.9
4.	Sports	50.0	36.4	42.9
5.	Community Activities	65.4	69.7	61.9
6.	Cultural Activities	88.5	60.6	47.6
7.	Religious Activities	76.9	57.6	38.1
8.	Reading	100.0	90.9	85.7
9.	T.V. Viewing	92.3	97.0	85.1
10.	Handicrafts	80.8	75.8	61.9
11.	Painting	30.8	21.1	9.5
12.	Gardening	80.8	60.6	52.4
13.	Sports Viewing	34.6	45.5	28.6
14.	Collecting	19.2	33.3	38.1
15.	Travel	88.5	72.7	57.1
16.	Music	73.1	69.7	66.7
17.	Movies	42.3	24.2	23.8
18.	Desire More	19.2	15.2	33.3

Table 56

The Percentage of People (average of all age groups) Who Report That They Engage in Any Particular Activity

	Activity	%
1.	Visit friends	96.36
2.	Reading	92.8
3.	T.V. Viewing	90.38
4.	Visit Relatives	80.76
5.	Handicrafts	72.98
6.	Travel	70.82
7.	Music	70.78
8.	Community Activities	68.32
9.	Cultural Activities	67.92
10.	Games	66.76
11.	Gardening	65.78
12.	Religious Activities	58.94
13.	Sports	42.28
14.	Sports Viewing	38.1
15.	Movies	30.1
16.	Collecting	26.32
17.	Painting	20.22
18.	Desire More	21.84

APPENDIX B

HOWARTH PERSONALITY

QUESTIONNAIRE

1. I prefer to vacation in quiet places.
2. I find it easy to put my worries aside and relax.
3. I am often inclined to go out of my way to win a point over someone.
4. Individuals should always show respect for the law.
5. I am inclined to be moody.
6. I enjoy taking risks just for fun.
7. I am a co-operative and helpful person.
8. I feel that I am not a successful person.
9. I am more persistent than most.
10. I often wonder what hidden reason another person may have for doing something nice for me.
11. Do you find it hard to really enjoy yourself at a lively party?
12. I sometimes feel that life is not worth living.
13. When I work on a committee I like to take charge of things.
14. Good manners are extremely important.
15. You are troubled by unusual fears or distastes.
16. I rarely act without careful consideration.
17. I seldom get an unreasoning dislike for another person.
18. I usually realize my personal expectations.
19. I give up easily.
20. Other people often take the credit for your achievements.
21. Do you like going out a lot?
22. People often say or do things which annoy me.
23. I speak out in meetings to oppose those whom I feel sure are wrong.

24. I admire my parents in all important matters.

25. I seldom suffer from sleeplessness.

26. I often act on suggestions quickly without stopping to think.

27. I do what is necessary to keep harmony in a group meeting.

28. At a social event people are usually glad to meet me.

29. I believe that "if at first you don't succeed, try, try again."

30. There are times when it seems everyone is against you.

31. I like to attend lots of social functions.

32. I often feel "just miserable" for no good reason.

33. I almost always feel that my own plans are best.

34. I prefer to go my own way rather than acting on approved rules.

35. I sometimes get very bad headaches.

36. Do people say you sometimes behave rashly?

37. I always try to follow the golden rule.

38. I am most often successful in dealing with people.

39. My enthusiasm for a new project does not persist.

40. Most people will tell a lie to keep out of trouble.

41. I make new friendships easily.

42. You feel lonesome even when you are with other people.

43. I am usually right on important matters.

44. I think strongly that churches deserve our financial support.

45. I sometimes lack energy when I need it.

46. I seldom make decisions on the spur of the moment.

47. I soon forget if another person takes momentary advantage of my friendliness.

48. Are you a self-confident person?

49. I am inclined to take my work casually.

50. Many people try to get more than they give.

51. At a party I like to meet as many people as I can.

52. I am easily "rattled" and upset.

53. I like to "take command" by knowing what is best for my group.

54. I think that moral standards are falling.

55. I almost always feel well and strong.

56. You are regarded as a controlled and cautious individual.

57. I always try to do unto others as I would have them do to me.

58. Are your feelings easily hurt?

59. It is hard for me to work continuously on a scholarly problem.

60. Most people respect the rights of others.

61. It is easy for me to talk with people.

62. Sometimes quite trivial troubles keep going around in my mind.

63. I dominate many of my acquaintances of about my own age.

64. This country needs higher standards of conduct.

65. I often lose sleep over my worries.

66. I believe in the saying "look before you leap."

67. If asked to work on a charity drive I would politely say I was busy.

68. I feel confident that I will succeed in life.

69. I persist on a job until it is completed even when others have given up.

70. I have been seriously slighted more than once.

71. I am a good social mixer.

72. I am frequently over-annoyed by quite small setbacks.

73. People have told me I am a dominant person.

74. I approve of contemporary sexual morality.

75. Do ideas run through your head and prevent you from sleeping?

76. On the whole I am rather an impulsive person.

77. To be helpful, I don't mind tackling a dirty job that others will not perform.

78. Are you troubled with feelings of inferiority?

79. I am able to work long hours without rest.

80. I distrust people I have just met until I get better acquainted.

81. I enjoy parties where there are lots of people.

82. I frequently worry about possible misfortune.

83. People say that I have leadership ability.

84. I am greatly concerned over the morals of my generation.

85. Do you often get heart thumping or palpitations?

86. I often act on the first thought that comes into my head.

87. If a person gets angry with me I try to calm them down.

88. Very few events disturb my self-confidence.

89. I find myself starting things and then losing interest in them.

90. I sometimes suspect the motives of others.

91. I am a sociable, outgoing person.

92. Do you suffer from "nerves"?

93. My opinion often sways others.

94. The police can be trusted not to ill-treat innocent people.

95. Do you worry about your health?

96. Uncontrolled impulsiveness is not part of my makeup.

97. I make a point of helping others.

98. My life has been a disappointment so far.

99. When perplexed by a difficult problem I keep trying to solve it.

100. Most people cheat if they can get away with it.

101. I generally keep in the background on social occasions.

102. Have you often felt listless or tired for no good reason?

103. People who argue with me generally come off worst.

104. I have often gone against my parent's wishes.

105. Do you frequently have attacks of shaking and trembling?

106. I usually say what I feel like saying at the moment.

107. I easily become involved in straightening out other people's problems.

108. Are you easily hurt when people find fault with you?

109. Whatever the difficulties I stick to my original intentions.

110. There are many unreasonable people about.

111. I prefer to stay at home with a hobby rather than attend a lively party.

112. I sometimes feel happy and sometimes depressed without any apparent reason.

113. I am not satisfied, generally, to let someone else take the lead.

114. I think I am more easygoing about right and wrong than most people.

115. Are you troubled by aches and pains?

116. I enjoy doing daring, foolhardy things.

117. I refrain from criticizing other people.

118. I usually succeed in anything that I attempt.

119. I am regarded as a very energetic person.

120. People pretend to care more about one another than they really do.

APPENDIX C

LIFE SATISFACTION INDEX Z

Here are some statements about life in general that people feel differently about. Would you read each statement on the list, and if you agree with it, put a check mark in the space under "AGREE." If you do not agree with a statement, put a check mark in the space under "DISAGREE." If you are not sure one way or the other, put a check mark in the space under "?." Please be sure to answer every question on the list.

		AGREE	DISAGREE	?
1.	As I grow older, things seem better than I thought they would be.	____	____	____
2.	I have gotten more of the breaks in life than most of the people I know.	____	____	____
3.	This is the dreariest time of my life.	____	____	____
4.	I am just as happy as when I was younger.	____	____	____
5.	These are the best years of my life.	____	____	____
6.	Most of the things I do are boring or monotonous.	____	____	____
7.	The things I do are as interesting to me as they ever were.	____	____	____
8.	As I look back on my life, I am fairly well satisfied.	____	____	____
9.	I have made plans for things I'll be doing a month or a year from now.	____	____	____
10.	When I think back over my life, I didn't get most of the important things I wanted.	____	____	____
11.	Compared to other people, I get down in the dumps too often.	____	____	____
12.	I've gotten pretty much what I expected out of life.	____	____	____
13.	In spite of what people say, the lot of the average man is getting worse, not better.	____	____	____

APPENDIX D

DEMOGRAPHIC AND SOCIAL ENVIRONMENT QUESTIONNAIRE

1. Sex: M( )

F( )

2. Age Group: 60-64( )

65-69( )

70-74( )

75-79( )

Over 80( )

3. Marital Status: Single----------( )

Married----------( )

Widow/Widower----( )

Separated/Divorced-( )

Other_____( )

4. Retirement: Retired---------- ( )

Semi-Retired---------( )

Working full-time-----( )

Housewife----------( )

Other (specify)--------( )

5. If retired, was your retirement due to

Ill health/disability---------- ( )

Reaching mandatory retirement age----( )

Your own choice----------( )

Others (specify)---------- ( )

6. Occupation: Job title before retirement (e.g., carpenter, housewife, manager, etc.)

_____

Job title if working past retirement

_____

7. Present Income Level:
   - Less than 2,500----------( )
   - Between 2,500-7,000---------( )
   - Between 7,000-15,000--------( )
   - Between 15,000-25,000-------( )
   - Over 25,000----------( )

8. Residence:
   - Maintain private house, apt. or room-----( )
   - Live with relatives----------( )
   - Live in Senior Citizens Residence--------( )
   - Live in Nursing Home----------( )
   - Live in Auxiliary Hospital----------( )

9. Education:
   - Less than Grade 9------( )
   - Some High School-------( )
   - Senior Matriculation----( )
   - Some University--------( )
   - Technical School--------( )
   - University Degree------( )
   - Graduate Degree--------( )

10. What is your state of health? Poor----------( )

Fair----------( )

Good----------( )

Excellent------( )

11. Religious Affiliation:

a) Do you have religious beliefs? Yes ( )

No ( )

b) If yes to Question a), what denomination?

Catholic---------( )

Protestant-------( )

Jew-------------( )

Other-----------( )

12. How much do these beliefs influence your daily life?

Slight influence-----( )

Moderate influence--( )

Strong influence----( )

13. As you look back on your life do you feel a sense of:

Great satisfaction----------( )

Considerable satisfaction----( )

Moderate satisfaction-------( )

Little satisfaction----------( )

No satisfaction-------------( )

14. I would rate my childhood as:

Very happy---------- ( )

Usually happy---------- ( )

Moderately happy-------( )

Somewhat unhappy------ ( )

Unhappy---------- ( )

15. If you have ever been married, would you rate your marriage as:

Extremely happy------- ( )

Usually happy---------- ( )

Moderately happy-------( )

Somewhat unhappy------ ( )

Unhappy---------- ( )

16. I have the following number of living children:

0----------( )

1----------( )

2----------( )

3----------( )

4----------( )

5 or more----------( )

17. I have the following number of grandchildren:

0----------( )

Less than 4----------( )

4 to 8----------( )

More than 8---------( )

18. Number of relatives including children and grandchildren, brothers, sisters, etc. who live within visiting distance:

0----------( )

Less than 5---------- ( )

5 to 10----------( )

More than 10--------( )

19. Social activities: My social life involves:

More family than friends------ ( )

More friends than family------ ( )

Both equally----------( )

20. My social activities take place:

Once a week or less----------( )

2 - 5 times weekly---------- ( )

More than 5 times weekly------( )

21. My social activities include:

Visiting friends----------( )

Visiting relatives----------( )

Games (bridge, poker, etc.)----( )

Sports (golf, dancing, etc.)-----( )

Community activities----------( )

Cultural activities----------( )

Religious activities----------( )

Other (specify)----------( )

22. Would you enjoy more social activities than you presently have?

Yes ( )

No ( )

23. Which of the following activities do you currently do?

Reading ---------- ( )

T.V. viewing ---------- ( )

Handicrafts ---------- ( )

Painting ---------- ( )

Gardening ---------- ( )

Sports ---------- ( )

Collecting ---------- ( )

Travel ---------- ( )

Music ---------- ( )

Movies ---------- ( )

Other (specify) ---------- ( )

APPENDIX E

ATTITUDE

QUESTIONNAIRE

1. If I had my choice I would prefer to be one of the following ages:

1 - 10----( )	31 - 40----( )	61 - 70----( )
11 - 20----( )	41 - 50----( )	71 - 80----( )
21 - 30----( )	51 - 60----( )	81 - 90----( )

2. If I won a Million Dollar Lottery tomorrow, I would do the following three things:

a) _____

_____

b) _____

_____

c) _____

_____

3. If retired:

a) What is your greatest single pleasure in retirement?

_____

_____

_____

b) What is your greatest problem in retirement?

_____

_____

_____

4. If not retired:

   a) What do you look forward to most in retirement?

   _____

   _____

   _____

   b) What do you feel your greatest problem will be?

   _____

   _____

   _____

5. Are there any other areas either related to the questions or not, that you would like to make additional comments upon?